

SONY

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**Broadcast & Audio-Video
General Catalogue
Spring 2005**

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Broadcast & Audio-Video General Catalogue

Spring 2005

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HDC-X300K HD Multi-purpose Camera

Features

*Superb picture quality with three 1/2-inch type 1.5-mega pixel HD CCDs *Low smear level of -120 dB *High signal-to-noise ratio of 54 dB *Progressive scan mode (29.97/25/23.976PsF) *Interlaced scan mode (59.94i/50i) *Compact and lightweight design - only 1.2 kg (2 lb 10 oz) *Low minimum illumination of 0.003 lx (+48 dB gain, 64 frames slow shutter) *Auto-focus function using the supplied focus servo lens - one push auto-focus/auto-tracing focus *HD-SDI interface *D-sub 15-pin interface *Camera remote control capability *Trigger function *Optical ND filter and electronic CC function



Supplied Accessories

Operation manual (1)
Focus servo lens (1)
AC adaptor (1)
AC cable (1)
Tally unit (1)

Optional Accessories

RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
MSU-700A Master Setup Unit
MSU-750 Master Setup Unit
VCT-U14 Tripod Adaptor

Specifications

General

Power requirements:
DC 12 V
Power consumption:
17 W
Operating temperature:
Camera: -10 to +45 °C (14 to 113 °F)
AC adaptor: 0 to 40 °C (32 to 104 °F)
Storage temperature:
-20 to +60 °C (-4 to +140 °F)
Operating humidity:
25 to 85% (relative humidity)
Mass:
1.2 kg (2 lb 10 oz)
Dimensions:
95 x 95 x 160 mm (3 3/4 x 3 3/4 x 6 3/8 inches) without projection

Camera

Pickup device:
3-chip 1/2-inch type 1.5-mega pixel CCD
Effective picture elements (H x V):
1440 x 1080
Optical system:
F1.4 prism
Built-in filters:
1:Clear, 2:1/4ND, 3:1/16 ND, 4:1/64ND
Lens mount:
Sony 1/2-inch bayonet mount
Signal system:
59.94i/23.976PsF/29.97PsF selectable at
59.94i mode
50i/25PsF selectable at 50i mode
Sync system:
Internal and external (3 state/VBS (BB))
Minimum illumination:
0.003 lx (F1.4, +48 dB gain, 64-frame accumulation)
Sensitivity (2000 lx, 89.9% reflectance):
F10 (typical)
Gain selection:
-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB
Shutter speed:
1/60 (50i mode), 1/100, 1/250, 1/500, 1/1000, 1/2000 s
Clear scan:
50 to 200 Hz (50i mode)
60 to 200 Hz (59.94i mode)
Slow shutter:
2, 3, 4, 5, 6, 7, 8, 16, 32, 64 frame

Smear level:
-120 dB (typical)
S/N ratio:
54 dB (typical)
Registration:
0.02 or less (all zones, without lens)
Geometric distortion:
Below measurable level (without lens)
Modulation depth at 20 MHz:
45% (typical)

Signal input

Genlock video:
BNC x1, 1.0 Vp-p, 75 Ω

Signal outputs

HD SDI:
BNC x1, 0.8 Vp-p +/-10%, 75 Ω

Video:
D-sub 15-pin

Tally:
Mini-jack

Other inputs/outputs

Trigger:
BNC x1

Remote:
8-pin

DC input:
DC jack

Eco-info

Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the printed wiring boards.

HDC-X300 HD Multi-purpose Camera

Features

- *Superb picture quality with three 1/2-inch type 1.5-mega pixel HD CCDs
- *Low smear level of -120 dB
- *High signal-to-noise ratio of 54 dB
- *Progressive scan mode (29.97/25/23.976PsF)
- *Interlaced scan mode (59.94i/50i)
- *Compact and lightweight design - only 1.2 kg (2 lb 10 oz)
- *Low minimum illumination of 0.003 lx (+48 dB gain, 64 frames slow shutter)
- *HD-SDI interface
- *D-sub 15-pin interface
- *Camera remote control capability
- *Trigger function
- *Optical ND filter and electronic CC function

Supplied Accessories

- Operation manual (1)
- AC adaptor (1)
- AC cable (1)
- Tally unit (1)

Optional Accessories

- RM-B150 Remote Control Unit
- RM-B750 Remote Control Unit
- RCP-750 Remote Control Panel (Joystick type)
- RCP-751 Remote Control Panel (Dial control type)
- MSU-700A Master Setup Unit
- MSU-750 Master Setup Unit
- VCT-U14 Tripod Adaptor



HD Cameras

Specifications

General

Power requirements:

DC 12 V

Power consumption:

17 W

Operating temperature:

Camera: -10 to +45 °C (14 to 113 °F)

AC adaptor: 0 to 40 °C (32 to 104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Operating humidity:

25 to 85% (relative humidity)

Mass:

1.2 kg (2 lb 10 oz)

Dimensions:

95 x 95 x 160 mm (3 3/4 x 3 3/4 x 6 3/8 inches) without projection

Camera

Pickup device:

3-chip 1/2-inch type 1.5-mega pixel CCD

Effective picture elements (H x V):

1440 x 1080

Optical system:

F1.4 prism

Built-in filters:

1:Clear, 2:1/4ND, 3:1/16 ND, 4:1/64ND

Lens mount:

Sony 1/2-inch bayonet mount

Signal system:

59.94i/23.976PsF/29.97PsF selectable at

59.94i mode

50i/25PsF selectable at 50i mode

Sync system:

Internal and external (3 state/VBS (BB))

Minimum illumination:

0.003 lx (F1.4, +48 dB gain, 64-frame accumulation)

Sensitivity (2000 lx, 89.9% reflectance):

F10 (typical)

Gain selection:

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB

Shutter speed:

1/60 (50i mode), 1/100, 1/250, 1/500,

1/1000, 1/2000 s

Clear scan:

50 to 200 Hz (50i mode)

60 to 200 Hz (59.94i mode)

Slow shutter:

2, 3, 4, 5, 6, 7, 8, 16, 32, 64 frame

Smear level:

-120 dB (typical)

S/N ratio:

54 dB (typical)

Registration:

0.02 or less (all zones, without lens)

Geometric distortion:

Below measurable level (without lens)

Modulation depth at 20 MHz:

45% (typical)

Signal input

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Signal outputs

HD SDI:

BNC x1, 0.8 Vp-p +/-10%, 75 Ω

Video:

D-sub 15-pin

Tally:

Mini-jack

Other inputs/outputs

Trigger:

BNC x1

Lens:

14-pin

Remote:

8-pin

DC input:

DC jack

Eco-info

Lead-free solder is used for soldering.

Halogenated flame retardants are not used in the printed wiring boards.

HDC-X310 HD Multipurpose camera with Fibre interface

HDC-X310K

Features

Features are similar to HDC-X300. HD-SDI Interface is replaced by a long distance capable monomode fibre interface allowing up to 1Km connection with a simple fibre network cable. HDC-X310K is supplied with 19X autofocus Lens.

Supplied Accessories

Operation manual (1)
AC adaptor (1)
AC cable (1)
Tally unit (1)

Optional Accessories

RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
MSU-700A Master Setup Unit
MSU-750 Master Setup Unit
VCT-U14 Tripod Adaptor
HFU-X310 Interface unit
HFBK-HD1 HD-SDI Option
HFBK-SD1 SDI Option
HFBK-XG1 XGA Option
HFBK-TS1 iLink (HDV) Option

Specifications

General

Power requirements:
DC 12 V
Power consumption:
17 W
Operating temperature:
Camera: -10 to +45 °C (14 to 113 °F)
AC adaptor: 0 to 40 °C (32 to 104 °F)
Storage temperature:
-20 to +60 °C (-4 to +140 °F)
Operating humidity:
25 to 85% (relative humidity)
Mass:
1.2 kg (2 lb 10 oz)
Dimensions:
95 x 95 x 160 mm (3 3/4 x 3 3/4 x 6 3/8 inches) without projection

Camera

Pickup device:
3-chip 1/2-inch type 1.5-mega pixel CCD
Effective picture elements (H x V):
1440 x 1080
Optical system:
F1.4 prism
Built-in filters:
1:Clear, 2:1/4ND, 3:1/16 ND, 4:1/64ND
Lens mount:
Sony 1/2-inch bayonet mount
Signal system:
59.94i/23.976PsF/29.97PsF selectable at 59.94i mode
50i/25PsF selectable at 50i mode
Sync system:
Internal and external (3 state/VBS (BB))

Minimum illumination:
0.003 lx (F1.4, +48 dB gain, 64-frame accumulation)
Sensitivity (2000 lx, 89.9% reflectance):
F10 (typical)
Gain selection:
-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB
Shutter speed:
1/60 (50i mode), 1/100, 1/250, 1/500, 1/1000, 1/2000 s
Clear scan:
50 to 200 Hz (50i mode)
60 to 200 Hz (59.94i mode)
Slow shutter:
2, 3, 4, 5, 6, 7, 8, 16, 32, 64 frame
Smear level:
-120 dB (typical)
S/N ratio:
54 dB (typical)
Registration:
0.02 or less (all zones, without lens)
Geometric distortion:
Below measurable level (without lens)
Modulation depth at 20 MHz:
45% (typical)

Signal input

Genlock video:
BNC x1, 1.0 Vp-p, 75 Ω



Signal outputs

Fibre Interface Monomode, LC Duplex type
Video:
D-sub 15-pin
Tally:
Mini-jack

Other inputs/outputs

Trigger:
BNC x1
Lens:
14-pin
Remote:
8-pin
DC input:
DC jack

Eco-info

Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the printed wiring boards.

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Production Cameras

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BVP-E30P 3-chip CCD Portable Color Camera

Features

*Portable studio/OB/EFP camera *Three-chip Power HAD EX CCD imager for superb picture quality *Advanced digital signal processing and 14-bit A/D conversion *Switchable progressive(*) and interlace modes *Excellent signal-to-noise ratio of 65 dB and remarkably low smear level of -145 dB (typical) *High sensitivity of F11 at 2000 lx *Digital 3-D white shading *Cross color suppression function *Low key saturation function *Adaptive highlight control (Auto knee mode) *Knee saturation control *Multi-matrix function *Enhanced vertical detail (Non-additive mix) *Adaptive detail control *Triple skin tone detail control *Electronic soft focus *Full compatibility with current Sony Camera Control Units for seamless integration into Sony BVP-900P Series, and BVP-E10 Series camera systems using existing Sony MSUs, CNUs and RCPs *Compatible with Sony Wireless Camera System WLL-CA55 and WLL-RX55 *Wideband component triax transmission system *Auto tracing white balance *Assignable switches *Memory Stick system for storage/recall of parameters *Menu knob *Adjustable shoulder pad

(*)25PsF



Supplied Accessories

Operational manual (1)
CD-ROM Operation manual (1)
Label for assignable switch (1)

Optional Accessories

CA-570P Camera Adaptor
WLL-CA55 Wireless Camera Transmitter (CER)
CA-905F Large Lens Adaptor (Fischer Type)
CCU-700AP Camera Control Unit
CCU-550DP Portable Camera Control Unit
RM-B750 Remote Control Unit
RM-B150 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
RCP-700 Remote Control Panel (Joystick Type)
RCP-701 Remote Control Panel (Dial Control Type)
CNU-700 Camera Command Network Unit
VCS-700 Video Selector
MSU-700A Master Setup Unit
MSU-750 Master Setup Unit
MSA-A "Memory Stick" IC Memory Media
VCT-14 Tripod Adaptor
AC-550CE AC Adaptor
BVF-55CE 5-inch Type B/W Viewfinder (CCIR)
BVF-10CE 1.5-inch Type B/W CRT Viewfinder (CCIR)

Specifications

General

Power consumption:
13 W
Operating temperature:
-20 °C to + 45 °C (-4 °F to +113 °F)
Storage temperature:
-20 °C to + 60 °C (-4 °F to +140 °F)

Dimensions (W x H x D):

125 x 285 x 291 mm (5 x 11 1/4 x 11 1/2 inches)

Mass:

Approx. 2.5 kg (5 lb 8 oz) (not including viewfinder)

Camera

A/D conversion:

14 bits

Optical system:

F 1.4 prism

Image device:

3-chip 2/3-inch type Power HAD CCD

Total picture elements (H x V):

1038 x 1188

Smear level (typical):

-145 dB

Scan format:

50i, 25PsF

Built in filters:

1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Horizontal resolution (center):

900 TV Lines

Modulation depth (center):

80%

Vertical resolution:

480 TV lines/530 TV lines (with EVS)

S/N ratio (typical):

65 dB

Sensitivity (typical):

F 11 at 2000 lx
(3200K 89.9% reflectance)

Gain selection:

-3, 0, +3, +6, +9, +12, +18, +24, +30, +36, +42 dB

Set-up memory card:

Memory Stick

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 s

Clear scan:

1/25(*) to 1/6000 s

Interface

Input connector:

Microphone: XLR 3-pin, -60 dBu

Output connector:

Test out: BNC type, 1.0 Vp-p, 75 Ω, unbalanced

Others:

Lens: 12-pin
View finder: 20-pin
Digital interface: 68-pin
Analog interface: 68-pin
Lens mount: Special bayonet mount (B4)

Eco-info

Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

(*)1/25-1/50 are on PsF mode.

BVP-E30WSP 3-chip CCD Portable Color Camera

Features

*Portable studio/OB/EFP camera *Three-chip Power HAD EX CCD imager for superb picture quality *Advanced digital signal processing and 14-bit A/D conversion *Switchable progressive(*) and interlace modes *Excellent signal-to-noise ratio of 65 dB and remarkably low smear level of -145 dB (typical) *High sensitivity of F11 at 2000 lx *Digital 3-D white shading *Cross color suppression function *Low key saturation function *Adaptive highlight control (Auto knee mode) *Knee saturation control *Multi-matrix function *Enhanced vertical detail (Non-additive mix) *Adaptive detail control *Triple skin tone detail control *Electronic soft focus *Full compatibility with current Sony Camera Control Units for seamless integration into Sony BVP-900P Series, and BVP-E10 Series camera systems using existing Sony MSUs, CNUs and RCPs *Compatible with Sony Wireless Camera System WLL-CA55 and WLL-RX55 *Wideband component triax transmission system *CC filter- electronic and optical *Auto tracing white balance *Assignable switches *Memory Stick system for storage/recall of parameters *Menu knob *Adjustable shoulder pad

(*)25PsF



Supplied Accessories

Operational manual (1)
CD-ROM Operation manual (1)
Label for assignable switch (1)

Optional Accessories

CA-570P Camera Adaptor
WLL-CA55 Wireless Camera Transmitter (CER)
CA-905F Large Lens Adaptor (Fischer Type)
CCU-700AP Camera Control Unit
CCU-550DP Portable Camera Control Unit
RM-B750 Remote Control Unit
RM-B150 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
RCP-700 Remote Control Panel (Joystick Type)
RCP-701 Remote Control Panel (Dial Control Type)
CNU-700 Camera Command Network Unit
VCS-700 Video Selector
MSU-700A Master Setup Unit
MSU-750 Master Setup Unit
MSA-A "Memory Stick" IC Memory Media
VCT-14 Tripod Adaptor
AC-550CE AC Adaptor
BVF-55CE 5-inch Type B/W Viewfinder (CCIR)
BVF-20WCE 2-inch Type 16:9 B/W Viewfinder

Specifications

General

Power consumption:
13 W
Operating temperature:
-20 °C to + 45 °C (-4 °F to +113 °F)
Storage temperature:
-20 °C to + 60 °C (-4 °F to +140 °F)

Dimensions (W x H x D):

125 x 285 x 291 mm (5 x 11 1/4 x 11 1/2 inches)

Mass:

Approx. 2.5 kg (5 lb 8 oz) (not including viewfinder)

Camera

A/D conversion:

14 bits

Optical system:

F 1.4 prism

Image device:

3-chip 2/3-inch type Power HAD CCD

Total picture elements (H x V):

1038 x 1188

Smear level (typical):

-145 dB

Scan format:

50i, 25PsF

Built in filters:

1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

A: CROSS, B: 3200K, C: 4300K, D: 6300K

Horizontal resolution (center):

700 TV Lines

Modulation depth (center):

80% (16:9)/60% (4:3)

Vertical resolution:

480 TV lines/530 TV lines (with EVS)

S/N ratio (typical):

65 dB

Sensitivity (typical):

F 11 at 2000 lx
(3200K 89.9% reflectance)

Gain selection:

-3, 0, +3, +6, +9, +12, +18, +24, +30, +36, +42 dB

Set-up memory card:

Memory Stick

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 s

Clear scan:

1/25(*) to 1/6000 s

Interface

Input connector:

Microphone: XLR 3-pin, -60 dBu

Output connector:

Test out: BNC type, 1.0 Vp-p, 75 Ω , unbalanced

Others:

Lens: 12-pin

View finder: 20-pin

Digital interface: 68-pin

Analog interface: 68-pin

Lens mount: Special bayonet mount (B4)

Eco-info

Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

(*)1/25-1/50 are on PsF mode.

DXC-D50PH 3-chip CCD Portable Color Camera

Features

*Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only *Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), high horizontal resolution (920 TV lines) *Hyper Gain (36 dB) *12-bit AD converter and DSP (Digital Signal Processing) *Knee Saturation process for faithful color reproduction even in highlight area *Adaptive Highlight Control realize optimum contrast balance *Skin-Tone Detail function with auto detection of active area *Horizontal Detail Frequency Control *Low Key Saturation function *Cross-Color Suppression *Black halo-free *Total Level Control System (TLCS) for extended range of Iris control *Auto Tracing White Balance (ATW) function *EZ Mode and EZ Focus for quick camera setup *Scene File Operation by RCP-D50/D51 *File Operation using Memory Stick *Optical Neutral Density (ND) filter and electronic Color Correction (CC) filter *Clear Scan (CLS) Function



Supplied Accessories

Camera head (1)
Camera handle (1)
Operating instructions (1)
Chart for flange focal (1)
Lens mount cap (1)
Wind screen (1)

Optional Accessories

CA-D50 Camera Adaptor
CCU-D50P Camera Control Unit
RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)
RM-M7G Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BC-M150 Ni-MH & Li-ion Battery Charger
CMA-8ACE AC Adaptor
ECM-672 Electret Condenser Microphone (U)
EC-0.3C2 Microphone cable
CAC-12 Camera Microphone Holder
WRT-847A UHF Synthesized Transmitter Unit (AU)
WRT-847B UHF Synthesized Transmitter Unit (21CE7)
WRT-847B UHF Synthesized Transmitter Unit (33CE7)
WRT-847B UHF Synthesized Transmitter Unit (67CE7)
WRT-822A UHF Synthesized Wireless Transmitter (62CE7)
WRT-822A UHF Synthesized Wireless Transmitter (69CE7)
WRT-822B UHF Synthesized Wireless Transmitter (21CE7)
WRT-822B UHF Synthesized Wireless Transmitter (33CE7)
WRT-822B UHF Synthesized Wireless Transmitter (62CE7)
WRT-822B UHF Synthesized Wireless Transmitter (67CE7)
WRR-855A UHF Synthesized Diversity Tuner (64U)

WRR-855A UHF Synthesized Diversity Tuner (66U)
WRR-855A UHF Synthesized Diversity Tuner (AU)
WRR-855A UHF Synthesized Diversity Tuner (68U)
WRR-855B UHF Synthesized Diversity Tuner (1416U)
WRR-855B UHF Synthesized Diversity Tuner (21CE7)
WRR-855B UHF Synthesized Diversity Tuner (33CE7)
WRR-855B UHF Synthesized Diversity Tuner (62CE7)
WRR-855B UHF Synthesized Diversity Tuner (67CE7)
WRR-861A UHF Synthesized Diversity Tuner (AU)
WRR-861B UHF Synthesized Diversity Tuner (U6264)
WRR-861B UHF Synthesized Diversity Tuner (U6668)
DXF-51 5-inch Monochrome Viewfinder
VCT-U14 Tripod Adaptor
CCZ-A Cables 26-pin/26-pin Cable
LC-421 Carrying Case
LCR-1 Camera Rain Cover
CA-TX50P Camera Triax Adaptor
CCU-TX50P Camera Control Unit
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
PH-8S Intercommunication Headset

Lenses supplied from Fujinon: A13 x 6.3 BERM/A20 x 8.6 BERM. Lenses supplied from Canon: YJ12 x 6.5 IRS/YJ19 x 9B IRS

Production Cameras

Specifications

Image device:

3-chip 2/3-inch type IT CCD

A/D conversion:

12 bits

Optics:

F1.4 medium index prism system

Effective picture elements (H x V):

980 x 586

Total picture elements (H x V):

1038 x 1188

Sensing area:

6.6 mm x 8.8 mm

Built-in filters:

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Electronic filter:

5600K (on/off)

Lens mount:

Sony 2/3-inch Bayonet mount

Signal system:

PAL color system

Scanning system:

2:1 interlaced, 525 lines, 60 fields/s

Horizontal frequency:

15.625 kHz

Vertical frequency:

50 Hz

Sync system:

Internal or external with VBS or BS signal

Horizontal resolution:

920 TV lines

Vertical resolution:

480 TV lines (without EVS), 530 TV lines
(with EVS)

Minimum illumination:

0.5 lx with F1.4, Hyper Gain (36 dB)

0.8 lx with F1.8, Hyper Gain (36 dB)

Sensitivity:

F11 at 2000 lx (3200 K, 89.9% reflectance)
(typical)

Gain selection:

-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB,
24 dB, 30 dB, 36 dB

Shutter speed selection:

OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s

Clear scan selection:

50.2 to 6000 Hz

Signal-to-noise ratio:

63 dB (typical)

Registration:

0.05% (all zones, without lens)

Geometric distortion:

Below measurable level

Power requirements:

DC 12 V

Video output:

Camera head BNC connector

VBS:

1.0 Vp-p, sync negative

26-pin connector of CA-D50

VBS:

1.0 Vp-p, sync negative

Y/R-Y/B-Y:

Y: 1.0 Vp-p negative

R-Y/B-Y: 525 mVp-p

RGB:

1.4 Vp-p

Y/C:

Y: 1.0 Vp-p negative

C: 300 mVp-p (burst level)

Input/output

INTERFACE:

Pro 76-pin DIGITAL, Pro 50-pin

VIDEO OUT:

BNC

LENS:

12-pin

VF:

20-pin

MONITOR OUT:

BNC type

REMOTE:

10-pin

MIC IN:

XLR 3-pin

Power requirements:

DC 12 V (10.5 to 17 V)

Power consumption:

14 W

Operating temperature:

-10°C to 45°C (14°F to 113°F)

Operating humidity:

Less than 85%

Storage humidity:

Less than 90%

Mass (camera head only):

2.2 kg (4 lb 13 oz)

Eco Info:

Lead-free solder is used for soldering
certain parts.

Halogenated flame retardants are not used
in cabinets.

DXC-D50PK 3-chip CCD Portable Color Camera

Features

*Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only *Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), high horizontal resolution (920 TV lines) *Hyper Gain (36 dB) *12-bit AD converter and DSP (Digital Signal Processing) *Knee Saturation process for faithful color reproduction even in highlight area * Adaptive Highlight Control realize optimum contrast balance *Skin-Tone Detail function with auto detection of active area *Horizontal Detail Frequency Control *Low Key Saturation function *Cross-Color Suppression *Black halo-free *Total Level Control System (TLCS) for extended range of Iris control *Auto Tracing White Balance (ATW) function *EZ Mode and EZ Focus for quick camera setup *Scene File Operation by RCP-D50/D51 *File Operation using Memory Stick *Optical Neutral Density (ND) filter and electronic Color Correction (CC) filter *Clear Scan (CLS) Function



Supplied Accessories

Camera head (1)
Camera handle (1)
Operating instructions (1)
Chart for flange focal (1)
Lens mount cap (1)
Wind screen (1)
External Microphone (1)
DXF-801 Viewfinder (1)
Zoom Lens (1)

Optional Accessories

CA-D50 Camera Adaptor
CCU-D50P Camera Control Unit
RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)
RM-M7G Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BC-M150 Ni-MH & Li-ion Battery Charger
CMA-8ACE AC Adaptor
ECM-672 Electret Condenser Microphone (U)
EC-0.3C2 Microphone cable
CAC-12 Camera Microphone Holder
WRT-847A UHF Synthesized Transmitter Unit (AU)
WRT-847B UHF Synthesized Transmitter Unit (21CE7)
WRT-847B UHF Synthesized Transmitter Unit (33CE7)
WRT-847B UHF Synthesized Transmitter Unit (67CE7)
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WRT-822A UHF Synthesized Wireless Transmitter (69CE7)
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WRT-822B UHF Synthesized Wireless Transmitter (33CE7)
WRT-822B UHF Synthesized Wireless Transmitter (62CE7)
WRT-822B UHF Synthesized Wireless Transmitter (67CE7)
WRR-855A UHF Synthesized Diversity Tuner (64U)

WRR-855A UHF Synthesized Diversity Tuner (66U)
WRR-855A UHF Synthesized Diversity Tuner (AU)
WRR-855A UHF Synthesized Diversity Tuner (68U)
WRR-855B UHF Synthesized Diversity Tuner (1416U)
WRR-855B UHF Synthesized Diversity Tuner (21CE7)
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WRR-855B UHF Synthesized Diversity Tuner (62CE7)
WRR-855B UHF Synthesized Diversity Tuner (67CE7)
WRR-861A UHF Synthesized Diversity Tuner (AU)
WRR-861B UHF Synthesized Diversity Tuner (U6264)
WRR-861B UHF Synthesized Diversity Tuner (U6668)
DXF-51 5-inch Monochrome Viewfinder
VCT-U14 Tripod Adaptor
CCZ-A Cables 26-pin/26-pin Cable
LC-421 Carrying Case
LCR-1 Camera Rain Cover
CA-TX50P Camera Triax Adaptor
CCU-TX50P Camera Control Unit
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
PH-8S Intercommunication Headset

Lenses supplied from Fujinon: A13 x 6.3 BERM/A20 x 8.6 BERM. Lenses supplied from Canon: YJ12 x 6.5 IRSYJ19 x 9B IRS



Production Cameras

Specifications

Image device:	3-chip 2/3-inch type IT CCD	VIDEO OUT:	BNC
A/D conversion:	12 bits	LENS:	12-pin
Optics:	F1.4 medium index prism system	VF:	20-pin
Effective picture elements (H x V):	980 x 586	MONITOR OUT:	BNC type
Total picture elements (H x V):	1038 x 1188	REMOTE:	10-pin
Sensing area:	6.6 mm x 8.8 mm	MIC IN:	XLR 3-pin
Built-in filters:	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	Power requirements:	DC 12 V (10.5 to 17 V)
Electronic filter:	5600K (on/off)	Power consumption:	14 W
Lens mount:	Sony 2/3-inch Bayonet mount	Operating temperature:	-10°C to 45°C (14°F to 113°F)
Signal system:	PAL color system	Operating humidity:	Less than 85%
Scanning system:	2:1 interlaced, 525 lines, 60 fields/s	Storage humidity:	Less than 90%
Horizontal frequency:	15.625 kHz	Mass (camera head only):	2.2 kg (4 lb 13 oz)
Vertical frequency:	50 Hz	*Eco Info*:	Lead-free solder is used for soldering certain parts.
Sync system:	Internal or external with VBS or BS signal		Halogenated flame retardants are not used in cabinets.
Horizontal resolution:	920 TV lines		
Vertical resolution:	480 TV lines (without EVS), 530 TV lines (with EVS)		
Minimum illumination:	0.5 lx with F1.4, Hyper Gain (36 dB) 0.8 lx with F1.8, Hyper Gain (36 dB)		
Sensitivity:	F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)		
Gain selection:	-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB		
Shutter speed selection:	OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s		
Clear scan selection:	50.2 to 6000 Hz		
Signal-to-noise ratio:	63 dB (typical)		
Registration:	0.05% (all zones, without lens)		
Geometric distortion:	Below measurable level		
Power requirements:	DC 12 V		
Video output:	Camera head BNC connector		
	VBS:		
	1.0 Vp-p, sync negative		
	26-pin connector of CA-D50		
	VBS:		
	1.0 Vp-p, sync negative		
	Y/R-Y/B-Y:		
	Y: 1.0 Vp-p negative		
	R-Y/B-Y: 525 mVp-p		
	RGB:		
	1.4 Vp-p		
	Y/C:		
	Y: 1.0 Vp-p negative		
	C: 300 mVp-p (burst level)		
Input/output			
INTERFACE:			
	Pro 76-pin DIGITAL, Pro 50-pin		

DXC-D50PL 3-chip CCD Portable Color Camera

Features

*Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only *Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), high horizontal resolution (920 TV lines) *Hyper Gain (36 dB) *12-bit AD converter and DSP (Digital Signal Processing) *Knee Saturation process for faithful color reproduction even in highlight area *Adaptive Highlight Control realize optimum contrast balance *Skin-Tone Detail function with auto detection of active area *Horizontal Detail Frequency Control *Low Key Saturation function *Cross-Color Suppression *Black halo-free *Total Level Control System (TLCS) for extended range of Iris control *Auto Tracing White Balance (ATW) function *EZ Mode and EZ Focus for quick camera setup *Scene File Operation by RCP-D50/D51 *File Operation using Memory Stick *Optical Neutral Density (ND) filter and electronic Color Correction (CC) filter *Clear Scan (CLS) Function



Supplied Accessories

Camera head (1)
Camera handle (1)
Operating instructions (1)
Chart for flange focal (1)
Lens mount cap (1)
Wind screen (1)
External Microphone (1)
DXF-801 Viewfinder (1)

Optional Accessories

CA-D50 Camera Adaptor
CCU-D50P Camera Control Unit
RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)
RM-M7G Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BC-M150 Ni-MH & Li-ion Battery Charger
CMA-8ACE AC Adaptor
ECM-672 Electret Condenser Microphone (U)
EC-0.3C2 Microphone cable
CAC-12 Camera Microphone Holder
WRT-847A UHF Synthesized Transmitter Unit (AU)
WRT-847B UHF Synthesized Transmitter Unit (21CE7)
WRT-847B UHF Synthesized Transmitter Unit (33CE7)
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WRR-861A UHF Synthesized Diversity Tuner (AU)
WRR-861B UHF Synthesized Diversity Tuner (U6264)
WRR-861B UHF Synthesized Diversity Tuner (U6668)
DXF-51 5-inch Monochrome Viewfinder
VCT-U14 Tripod Adaptor
CCZ-A Cables 26-pin/26-pin Cable
LC-421 Carrying Case
LCR-1 Camera Rain Cover
CA-TX50P Camera Triax Adaptor
CCU-TX50P Camera Control Unit
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
PH-8S Intercommunication Headset

Lenses supplied from Fujinon: A13 x 6.3 BERM/A20 x 8.6 BERM. Lenses supplied from Canon: YJ12 x 6.5 IRS/YJ19 x 9B IRS

Production Cameras

Specifications

Image device:

3-chip 2/3-inch type IT CCD

A/D conversion:

12 bits

Optics:

F1.4 medium index prism system

Effective picture elements (H x V):

980 x 586

Total picture elements (H x V):

1038 x 1188

Sensing area:

6.6 mm x 8.8 mm

Built-in filters:

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Electronic filter:

5600K (on/off)

Lens mount:

Sony 2/3-inch Bayonet mount

Signal system:

PAL color system

Scanning system:

2:1 interlaced, 525 lines, 60 fields/s

Horizontal frequency:

15.625 kHz

Vertical frequency:

50 Hz

Sync system:

Internal or external with VBS or BS signal

Horizontal resolution:

920 TV lines

Vertical resolution:

480 TV lines (without EVS), 530 TV lines
(with EVS)

Minimum illumination:

0.5 lx with F1.4, Hyper Gain (36 dB)

0.8 lx with F1.8, Hyper Gain (36 dB)

Sensitivity:

F11 at 2000 lx (3200 K, 89.9% reflectance)
(typical)

Gain selection:

-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB,
24 dB, 30 dB, 36 dB

Shutter speed selection:

OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s

Clear scan selection:

50.2 to 6000 Hz

Signal-to-noise ratio:

63 dB (typical)

Registration:

0.05% (all zones, without lens)

Geometric distortion:

Below measurable level

Power requirements:

DC 12 V

Video output:

Camera head BNC connector

VBS:

1.0 Vp-p, sync negative

26-pin connector of CA-D50

VBS:

1.0 Vp-p, sync negative

Y/R-Y/B-Y:

Y: 1.0 Vp-p negative

R-Y/B-Y: 525 mVp-p

RGB:

1.4 Vp-p

Y/C:

Y: 1.0 Vp-p negative

C: 300 mVp-p (burst level)

Input/output

INTERFACE:

Pro 76-pin DIGITAL, Pro 50-pin

VIDEO OUT:

BNC

LENS:

12-pin

VF:

20-pin

MONITOR OUT:

BNC type

REMOTE:

10-pin

MIC IN:

XLR 3-pin

Power requirements:

DC 12 V (10.5 to 17 V)

Power consumption:

14 W

Operating temperature:

-10°C to 45°C (14°F to 113°F)

Operating humidity:

Less than 85%

Storage humidity:

Less than 90%

Mass (camera head only):

2.2 kg (4 lb 13 oz)

Eco Info:

Lead-free solder is used for soldering
certain parts.

Halogenated flame retardants are not used
in cabinets.

DXC-D50WSPL 3-chip CCD Portable Color Camera

Features

*Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only *Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), and high horizontal resolution (850 TV lines/4:3 mode, 800 TV lines/16:9 mode) *16:9 and 4:3 Switchable *16:9 ID Pulse *Hyper Gain (36 dB) *12-bit AD converter and DSP (Digital Signal Processing) *Knee Saturation process for faithful color reproduction even in highlight area *Adaptive Highlight Control realize optimum contrast balance *Skin-Tone Detail function with auto detection of active area *Horizontal Detail Frequency Control *Low Key Saturation function *Cross-Color Suppression *Black halo-free *Total Level Control System (TLCS) for extended range of Iris control *Auto Tracing White Balance (ATW) function *EZ Mode and EZ Focus for quick camera setup *Scene File Operation by RCP-D50/D51 *File Operation Using Sony Memory Stick *Clear Scan (CLS) Function



Supplied Accessories

Camera head (1)
Camera handle (1)
Operating instructions (1)
Chart for flange focal (1)
Lens mount cap (1)
Wind screen (1)
External Microphone (1)
DXF-801 Viewfinder (1)

Optional Accessories

CA-D50 Camera Adaptor
CCU-D50P Camera Control Unit
RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)
RM-M7G Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BC-M150 Ni-MH & Li-ion Battery Charger
CMA-8ACE AC Adaptor
ECM-672 Electret Condenser Microphone (U)
EC-0.3C2 Microphone cable
CAC-12 Camera Microphone Holder
WRT-847A UHF Synthesized Transmitter Unit (AU)
WRT-847B UHF Synthesized Transmitter Unit (21CE7)
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WRR-861A UHF Synthesized Diversity Tuner (AU)
WRR-861B UHF Synthesized Diversity Tuner (U6264)
WRR-861B UHF Synthesized Diversity Tuner (U6668)
DXF-51 5-inch Monochrome Viewfinder
VCT-U14 Tripod Adaptor
CCZ-A Cables 26-pin/26-pin Cable
LC-421 Carrying Case
LCR-1 Camera Rain Cover
CA-TX50P Camera Triax Adaptor
CCU-TX50P Camera Control Unit
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
PH-8S Intercommunication Headset

Lenses supplied from Fujinon: A13 x 6.3 BERM/A20 x 8.6 BERM. Lenses supplied from Canon: YJ12 x 6.5 IRS/YJ19 x 9B IRS

Production Cameras

Specifications

Image device:

3-chip 2/3-inch type IT CCD

A/D conversion:

12 bits

Optics:

F1.4 medium index prism system

Effective picture elements (H x V):

980 x 586

Total picture elements (H x V):

1038 x 1188

Sensing area:

9.6 mm x 5.4 mm

Built-in filters:

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Electronic filter:

5600K (on/off)

Lens mount:

Sony 2/3-inch Bayonet mount

Signal system:

PAL color system

Scanning system:

2:1 interlaced, 625 lines, 50 fields/s

Horizontal frequency:

15.625 kHz

Vertical frequency:

50 Hz

Sync system:

Internal or external with VBS or BS signal

Horizontal resolution:

850 TV lines (4:3 mode), 800 TV lines (16:9 mode)

Vertical resolution:

480 TV lines (without EVS), 530 TV lines (with EVS)

Minimum illumination:

0.5 lx with F1.4, Hyper Gain (36 dB)

0.8 lx with F1.8, Hyper Gain (36 dB)

Sensitivity:

F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)

Gain selection:

-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB

Shutter speed selection:

OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s

Clear scan selection:

50.2 to 6000 Hz

Signal-to-noise ratio:

63 dB (typical)

Registration:

0.05% (all zones, without lens)

Geometric distortion:

Below measurable level

Power requirements:

DC 12 V

Video output:

Camera head BNC connector

VBS:

1.0 Vp-p, sync negative

26-pin connector of CA-D50

VBS:

1.0 Vp-p, sync negative

Y/R-Y/B-Y:

Y: 1.0 Vp-p negative

R-Y/B-Y: 525 mVp-p

RGB:

1.4 Vp-p

Y/C:

Y: 1.0 Vp-p negative

C: 300 mVp-p (burst level)

Input/output

INTERFACE:

Pro 76-pin DIGITAL, Pro 50-pin

VIDEO OUT:

BNC

LENS:

12-pin

VF:

20-pin

MONITOR OUT:

BNC type

REMOTE:

10-pin

MIC IN:

XLR 3-pin

Power requirements:

DC 12 V (10.5 to 17 V)

Power consumption:

14 W

Operating temperature:

-10°C to 45°C (14°F to 113°F)

Operating humidity:

Less than 85%

Storage humidity:

Less than 90%

Mass (camera head only):

2.2 kg (4 lb 13 oz)

*Eco Info:

Lead-free solder is used for soldering certain parts.

Halogenated flame retardants are not used in cabinets.

SONY

Sensor Cameras

BRC-300	20
DXC-390P	22
DXC-990P	24
DXC-C33P	26

BRC-300 3-CCD Color Video Camera

Features

*1/4.7-type IT Mega Pixels 3-CCD with Advanced HAD technology*Unique-all-in-one design - Combines camera, lens & pan/tilt mount*48x zoom capability*Minimum illumination - 7 lx at F1.6*Horizontal resolution 600 TV lines*High performance Pan/Tilt/Zoom mechanism*4:3/16:9 aspect selectable (16:9 precision technology)*Image flip function - Allows for desk top or ceiling mount installation*Optional interface card slot - RGB, SDI, and Fiber*Optional easy-to-use and ergonomic designed RemoteControl Unit - Remotely control via RS-232C and RS-422 (VISCA protocol)* Optional Optical Multiplex Unit - Allows for long-distance operation using fiber cable

Supplied Accessories

AC adaptor (1)
IR remote commander (1)
Terminal connector (1)
AC adaptor cable (1)
Ceiling bracket (2)
Operating instructions (1)

Optional Accessories

BRBK-301 Analog/RGB Component Card
BRBK-302 SDI Card
BRBK-303 Optical Multiplex Card
RM-BR300 Remote Control Unit
BRU-300 Optical Multiplex Unit
CCFC-M100 Optical Fiber Cable
CCXC-9DBS Cable 9-pin/5BNCs Cable
VCL-HG0737X Wide Conversion Lens
CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin



Specifications

Image device:

Three 1/4.7 type IT Advanced HAD CCD (x3),
1070000pixels (gross)

CCD effective pixels

4:3 mode:

960 (H) x 720 (V)

16:9 mode:

1,152 (H) x 648 (V)

Effective pixels

NTSC:

768 (H) x 494 (V)

PAL:

752 (H) x 582 (V)

Signal systems:

NTSC/PAL

Horizontal resolution:

600 TV lines(4:3 mode)

Sync systems:

Internal/External

Lens:

12x optical zoom, 48x with digital zoom

Focal length:

f = 3.6 to 43.2 mm (F1.6 to F2.8)

Horizontal viewing angle

4:3 mode:

3.3 (Tele end) to 37.8 degrees (Wide end)

16:9 mode:

4.0 (Tele end) to 45.4 degrees (Wide end)

Minimum object distance:

300 mm (Wide end), 800 mm (Tele end)

Pan/Tilt angle:

-170 to +170 degrees (Pan), -30 to +90
degrees (Tilt)

Pan/Tilt speed:

0.25 to 60 degrees/s (Pan/Tilt)

Minimum illumination:

7 lx at F1.6

S/N ratio:

50 dB

Shutter speed

NTSC:

1/10000 to 1/4 s

PAL:

1/10000 to 1/3 s

Gain:

Auto/Manual (-3 to 18 dB, 3 dB steps)
switchable

White balance:

Auto, Indoor, Outdoor, One-push WB, Manual

Preset positioning:

6 positions

Analog output:

VBS (BNC), Y/C (4-pin Mini DIN)

Camera control interface:

RS-232C (VISCA protocol) / RS-422 (VISCA
protocol)

Back-light compensation:

On / Off

Operating temperature:

0 to 40 degrees (32 to 104 °F)

Storage temperature:

-20 to 60 degrees (-4 to 140 °F)

Power requirement:

DC 12 V

Power consumption:

21.6 W (without optional card)

Dimensions (W x H x D):

180 x 210.1 x 205 mm (7 1/8 x 8 3/8 x 8 1/8 x
inches) (without projection ports)

Mass:

2.7 kg (5 lb 15 oz)

DXC-390P 3-CCD Color Video Camera

Features

*1/3 type IT 3CCDs*C mount*Exwave HAD technology provides excellent sensitivity and low smear levels*Superior picture quality: High resolution of 800 TV lines and S/N ratio of 61 dB*High Sensitivity of F8 at 2000 lux*Scene Files and User Files*Powerful picture contrast controls: DynaLatitude, DCC+ and Black Stretch*Several enhance controls: Detail, Linear Matrix and Partial Enhance*Wide selection of Automatic Exposure (AE) modes*Hyper Gain*RGB, Y/C and composite video outputs*Full control of functions from the side panel or the optional RM-C950 Remote Control Unit



Supplied Accessories

Lens cap (1)
Tripod adaptor (1)
Operation manual (1)
Panel sheet for RM-C950 (1)

Optional Accessories

VCL-610WEA Motorised remote control lens
f=6.5 to 65 mm (x10)
VCL-614WEA Remote/manual macro lens
f=5.5 to 77 mm (x14)
VCL-616WEA 1/3 Type C-mount Lens
VCL-08WM C mount lens (f=8 mm for 3-CCD camera)
VCL-16WM C mount lens (f=16 mm for 3-CCD camera)
VCL-25WM C mount lens (f=25 mm for 3-CCD camera)
RM-C950 Remote Control Unit
CMA-D2CE Camera Adaptor
CMA-D3CE Camera Adaptor
DKR-700P Digital Still Recorder
MVA-15 Microscope adaptor
MVAC-33-SM Coupler
MVAC-33-N Coupler
MVAC-33-O Coupler
CCDC cables 12-pin/4-pin DC Cables
CCMC-12 cables 12-pin/12-pin Multi Core Cables
CCXC-9DBS Cable 9-pin/5BNCs Cable
CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin
CCZ-A Cables 26-pin/26-pin Cable

Sensor Cameras

Specifications

Image device:
1/3 type IT (Interline Transfer) CCD (x3)

Effective picture elements:
752 (H) × 582 (V)

Sensing area:
6.00 (H) × 4.96 (V) mm

Scanning system:
2:1 interlaced, 625 lines

Horizontal frequency:
15.625 kHz

Vertical frequency:
50 Hz

Sync system:
Internal or External with VBS,
HD/VD(Automatic Switching)

Phase control:
H/SC phase control

Horizontal resolution:
800TV lines

Lens mount:
C mount

Flange back:
17.526 mm in air

Sensitivity:
F8.0 at 2000 lux

Minimum illumination
4 lux (F2, GAIN:HYPER)

S/N ratio:
61 dB

Gain
STEP/AGC/HYPER selectable

STEP:
0 to 24 dB by 1 dB step

AGC:
0 to 24 dB (Limit value: 6 dB, 12 dB,
18 dB, 24 dB variable)

HYPER:
30 dB

Electronic shutter
OFF/STEP/VARIABLE/CCD IRIS selectable

OFF:
1/50 s

STEP:
OFF (PAL:1/50 s), F.L.(PAL:1/120 s),
1/125, 1/250, 1/500, 1/1000, 1/2000,
1/4000, 1/10000, 1/20000, 1/40000,
1/100000, 0.1, 0.2, 0.3, 0.5, 1.0, 1.5,
2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 6.0, 7.0,
8.0 s

VARIABLE:
in high-speed mode 310/625 to
1/625H, OFF
in low-speed mode 255 to 1 frames
for field mode
256 to 2 frames for frame mode

CCD IRIS:
1/60 to 1/100,000 s (Limit value:
1/500, 1/1000, 1/2000, 1/4000,
1/10000, 1/20,000, 1/40,000,
1/100,000 s variable)

Lens:
Remote (Auto or Manual)/Video selectable

AE area:
Multi/Large/Medium/Spot/Slit/Manual
selectable

AE level:
Variable

AE speed:
Fast/Mid/Slow selectable

AE detect:
Average/Peak selectable

Contrast Effect:
Manual/DynaLatitude/DCC+ selectable

Knee Point:
High/Normal/Low selectable(Contrast
Effect: Manual)

Black stretch:
Variable (Contrast Effect: Manual)

Gamma:
ON/OFF Variable

Pedestal:
Master and R/B Manual adjustable

Black balance:
ABB

White balance:
AWB/ATW NORMAL/ATW
WIDE/MANUAL/3200K/5600K selectable
AWB or ATW R/B Paint, MANUAL R/B Gain

ATW area:
NORMAL/MANU selectable

ATW speed:
FAST/NORMAL/SLOW selectable

Detail level:
ON/OFF (Variable at ON)

Detail Frequency:
HIGH/MID/LOW selectable

Linear matrix:
ON/OFF

Linear matrix MODE:
STANDARD/R Enhance/G Enhance/B
Enhance/Manual selectable

Partial Enhance:
ALL/IN/OUT selectable

CCD integration mode:
FIELD/FRAME selectable

Shading Compensation:
OFF/ON (Manual control)

Trigger Polarity:
Positive edge trigger /Negative edge
trigger selectable

Baud rate:
19200/9600/4800/2400/1200 selectable

Sync:
RGB/G/OFF selectable

Strobe:
ON/OFF

User File:
A/B switchable (Two pattern memories)

Scene File:
STANDARD/MICROSCOPE/FULL
AUTO/STROBE/FILE A or B

Output signal
VBS:
1.0 Vp-p, 75 Ω, sync negative

RGB:
0.7 Vp-p, 75 Ω, Sync ON/OFF possible

SYNC:
2 Vp-p, 75 Ω

Y:
1.0 Vp-p, 75 Ω

C:
0.3 Vp-p, 75 Ω, without sync

Operating temperature:
-5 to 45°C

Storage temperature:
-20 to 60°C

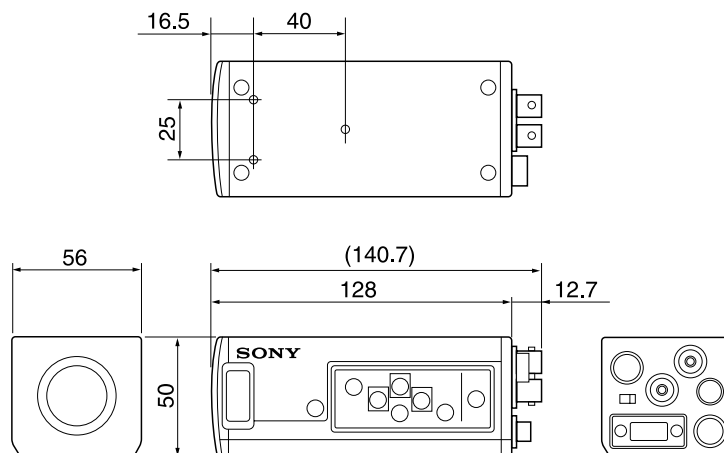
Power requirements:
DC 10.5 to 15.0 V

Power consumption:
Approx. 7.6 W

Dimensions:
56 (W) × 50 (H) × 128 (D) mm
(Excluding projecting parts)

Weight:
Approx. 370 g

Connectors:
Lens (6-pin)
RGB/SYNC (9-pin D-sub)
DC IN/VBS (12-pin)
VIDEO OUT (BNC)
TRIGGER IN (BNC)
REMOTE (8-pin mini DIN)



DXC-990P 3-CCD Color Video Camera

The DXC-990P is a 1/2 type 3-CCD color video camera featuring a new DSP technology as well as Exwave HAD technology for excellent sensitivity (F11@2000 lux) and low vertical smear. Using a bayonet mount lens and providing a resolution of 850 TV lines and high S/N ratio (62 dB), the DXC-990P is ideal for applications such as semiconductor inspection, printing inspection and microscopy, where picture accuracy and detail are important. All functions are easily controlled from the camera's rear panel with an optional RM-C950 Remote Control Unit or an external computer via an RS-232C interface. Multiple component, RGB, Y/C and composite video signal outputs allow the DXC-990P to be integrated into virtually any industrial video system. Optional adapters and couplers are available for mounting onto various types of microscopes.

Features

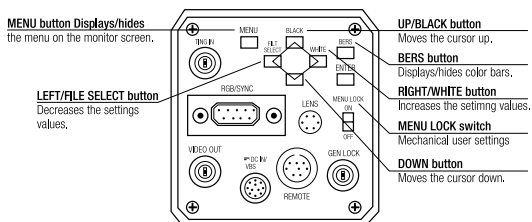
*New Digital Signal Processing (DSP) technology for powerful picture contrast controls*Partial Enhance*DynaLatitude*DCC+*High Sensitivity (F11@2000 lux)*Y/C, RGB, Y/R-Y/B-Y, and composite video signal outputs*Linear matrix, shading compensation, master pedestal and gamma selection*Flash synchronization function*Full color genlock*CCD iris and adjustable window Auto Exposure*Fixed, One-push, Manual and Automatic White Balance*Color shading matrix and painting connections*Two set up memories*Color bar generator*Cable extension up to 100 m with CMA-D3 adaptor

Supplied Accessories

Lens mount cap (1)
Stopper mount (1)
Operation manual (1)
Panel sheet for RM-950 (1)

Optional Accessories

CMA-D2CE Camera Adaptor
CMA-D2MDCE Camera Adaptor
CMA-D3CE Camera Adaptor
CCMC-12 cables 12-pin/12-pin Multi Core Cables
CCDC cables 12-pin/4-pin DC Cables
CCDC-A Cables 12-pin/4-pin Cable
CCXC-9DD Cable 9-pin/9-pin Cable
CCXC-9DBS Cable 9-pin/5BNCs Cable
CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin
CCMC-3MZ Cable
RM-C950 Remote Control Unit
LO-32BMT 2/3-inch Lens Mount Adaptor
VCL-714BXEA Adaptable Zoom Lens
VCL-717BXEA Adaptable Zoom Lens
VCL-0716BXA 1/2 Type Bayonet Mount Lens



Sensor Cameras

Specifications

Image device:
1/2 type IT (Interline Transfer) Exwave CCD
(x3)

Effective picture elements:
752 (H) x 582 (V)

Sensing area:
6.4 x 4.8 mm

Horizontal frequency:
15.734 kHz

Vertical frequency:
59.94 Hz

Sync sytem:
Internal or external with VBS, HD/VD

Horizontal resolution:
850 TV lines

Sensitivity:
F11 (2000 lux)

Minumum illumination:
1 lux (F1.4, GAIN: HYPER)

S/N ratio:
62 dB

Gain:
STEP/AGC (0 to 24 dB)/HYPER

Shutter speed:
0.5 to 1/100,000 s

Lens mount:
Bayonet mount

AE area:
Multi/Large/Medium/Spot/Slit/Manual

AE level:
Variable

AE speed:
Fast/Mid/Slow selectable

AE detect:
Average/Peak selectable

Contrast effect:
Manual/DynaLatitude/DCC+ selectable

Knee point:
High/Normal/Low selectable

Black stretch:
Variable

Gamma:
On/Off

Pedestal:
Master, R/B manual adjustable

Black balance:
ABB

White balance:
AWB/ATW normal/ATW wide/Manual/3200
K/5600 K selectable
AWB or ATW R/B paint, manual R/G gain

ATW area:
Normal/Manual

ATW speed:
Slow/Mid/Fast

Detail level:
On (Variable)/Off

Detail frequency:
High/Mide/Low

Linear matrix:
On/Off

Linear matrix code:
STANDARD/R Enhance/G Enhance/B
Enhance/Manual selectable

Partial enhance:
All/In/Out

CCD integration mode:
Field/Frame

Shading compensation:
On/Off (manual)

Trigger polarity:
Positive edge trigger/Negative edge
trigger selectable

Baud rate:
19200/9600/4800/2400/1200

Sync:
RGB/G/OFF

Trigger:
On/Off

User file:
A/B

Scene file:
Standard/Microscope/Full Auto/Strobe/File
A or B

Output signals:
VBS, RGB/SYNC, Y/C, Y/R-Y/B-Y

Serial data:
RS-232C

Operational temperature:
-5 to 45°C (23 to 113°F)

Storage temperature:
-20 to 60°C (-4 to 140°F)

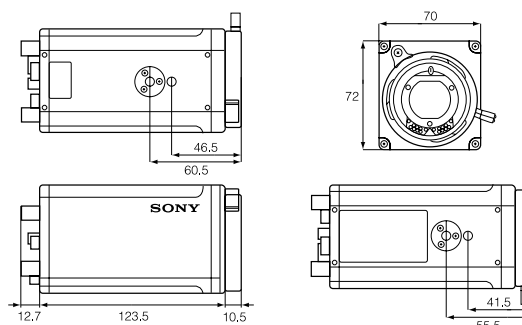
Power requirements:
DC 10.5 to 15.0 V

Power consumption:
Approx. 8.0 W

Dimensions:
70 x 72 x 123.5 mm (2 7/8 x 2 7/8 x 4 7/8
inches)

Mass:
630 g (1 lb 6 oz)

Connectors:
RGB/SYNC (9-pin D-sub), DC IN/VBS
(12-pin), VIDEO OUT (BNC), TRIGGER IN
(BNC), REMOTE (8-pin mini DIN), GEN
LOCK IN (BNC), LENS (6-pin)



DXC-C33P 3-CCD Color Video Camera

Ideal for use in space-limited locations, the DXC-C33P incorporates one of the smallest/lightest camera head unit featuring three 1/3 type CCDs. In spite of its compact (32 (W) x 38 (H) x 40 (D) mm, 1 5/16 x 1 1/2 x 1 5/8 inches) and lightweight (48 g, 1.7 oz) camera head unit, this model inherits superb picture quality of the DXC Series. Its horizontal resolution is 850 TV lines and the high sensitivity is 2000 lux at F8. Also, various features such as DynaLatitude, Partial Enhance are provided to this model. First for the DXC Series and also first for 3-CDD small head cameras, the DXC-C33P is equipped with a DV output terminal. Thanks to the DV output terminal, video signals can be recorded to i.LINK interface-equipped VTR with no quality deterioration. With the excellent features and medical approval, the DXC-C33P is the right choice for medical fields, and also for demanding applications such as research and industrial fields.



Features

*Small camera head*High picture quality*i.LINK DV out*10-bit DSP*DynaLatitude*Frame memory*Partial Enhance*User-friendly control panel*Two AE areas preset*RS-232C interface*External synchronization (HD/VD, VBS)

Supplied Accessories

Tripod adaptor (1)
AC power cable (1)
Lens cap (1)
Panel sheet for RM-C950 (1)
Operation manual (1)

Optional Accessories

VCL-08WM C mount lens (f=8 mm for 3-CCD camera)
VCL-16WM C mount lens (f=16 mm for 3-CCD camera)
VCL-25WM C mount lens (f=25 mm for 3-CCD camera)
DSR-20MDP DVCAM Recorder
RM-C950 Remote Control Unit
CCMC-20 cables 20-pin/20-pin Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
CCXC-9DB Cable 9-pin/9-pin Cable
CCXC-9DD Cable 9-pin/9-pin Cable
CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin

Sensor Cameras

Specifications

Image device:
1/3 type IT (Interline Transfer) CCD (x3)

Effective picture elements:
752 (H) x 582 (V)

Sensing area:
4.8 (H) x 3.6 (V) mm

Scanning system:
2:1 interlaced, 625 lines

Horizontal frequency:
15.625 kHz

Vertical frequency:
50 Hz

Sync system:
Internal or external with VBS or HD/VD

Phase control:
H/SC phase control

Horizontal resolution:
850 TV lines

Lens mount:
C mount

Flange back:
17.526 mm in air

Sensitivity:
F8.0 at 2000 lux (3200 K)

Minimum illumination:
4 lux (F2, GAIN: HYPER)

S/N ratio:
61 dB (Typical)

Gain
STEP/AGC/HYPER selectable
STEP:
0 to 24 dB by 1 dB step
AGC:
0 to 24 dB (Limit value: 6 dB, 12 dB,
18 dB, 24 dB selectable)
HYPER:
30 dB

Electronic shutter:
8.0 to 1/100,000 s

Lens:
Manual Iris

AE area:
Multi/Large/Medium/Spot/Slit/Manual
selectable

AE level:
Variable

AE speed:
Fast/Mid/Slow selectable

AE detect:
Average/Peak selectable

Contrast effect:
Manual/DynaLatitude/DCC+ selectable

Knee point:
High/Normal/Low selectable
(Contrast Effect: Manual)

Black stretch:
Variable (Contrast Effect: Manual)

Gamma:
ON/OFF (Variable at ON)

Pedestal:
Master and R/B Manual adjustable

Black balance:
ABB

White balance:
AWB/ATW NORMAL/ATW
WIDE/MANUAL/3200 K/5600 K selectable
AWB or ATW R/B Paint, MANUAL R/B Gain

ATW area:
NORMAL/MANU selectable

ATW speed:
FAST/NORMAL/SLOW selectable

Detail level:
ALL/TARGET/OFF (Variable at ALL or
TARGET)

Detail frequency:
HIGH/MID/LOW selectable

Linear matrix:
ALL/TARGET/OFF

Linear matrix mode:
STANDARD/R Enhance/G Enhance/B
Enhance/Manual selectable

Partial enhance:
ALL/IN/OUT selectable

CCD integration mode:
FIELD/FRAME selectable

Shading compensation:
OFF/ON (Manual control)

Trigger polarity:
Positive edge trigger/Negative edge trigger
selectable

Baud rate:
19200/9600/4800/2400/1200 selectable

Sync:
RGB/G/OFF selectable

Strobe:
Slave

User file:
A/B switchable
(Two pattern memories)

Scene file:
STANDARD/MICROSCOPE/FULL
AUTO/STROBE/FILE A or B

Output signal
i.LINK (DV):
IEEE1394 Based

VBS:
1.0 Vp-p, 75 Ω , sync negative

RGB:
0.7 Vp-p, 75 Ω , sync switchable

SYNC:
2 Vp-p, 75 Ω

Y:
1.0 Vp-p, 75 Ω

C:
PAL 0.3 Vp-p, 75 Ω , without sync

Operating temperature:
-5 to 45°C (23 to 113°F)

Storage temperature:
-20 to 60°C (-4 to 140°F)

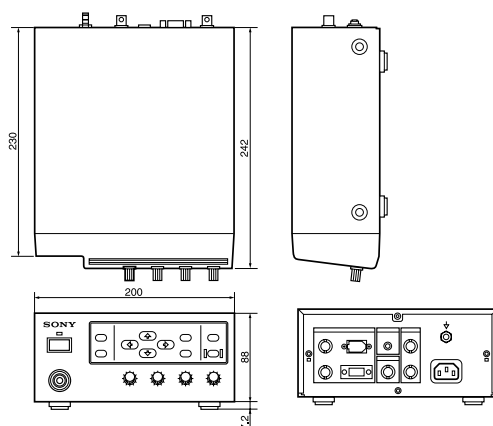
Power supply:
AC 100 to 240 V, 50/60 Hz

Power consumption:
Max. 18 W

Dimensions
CHU: 32 (W) x 38 (H) x 40 (D) mm
(1 5/16 x 1 1/2 x 1 5/8 inches)
CCU: 200 (W) x 88 (H) x 242 (D) mm
(7 7/8 x 3 1/2 x 9 5/8 inches)

Mass
CHU: 48 g (1.7 oz)
CCU: 2.5 kg (5 lb 8 oz)

Connectors:
DV OUT (6-pin jack)
RGB/SYNC (9-pin D-sub)
VIDEO OUT (BNC)
S-VIDEO (4-pin mini DIN)
FS/TRIG IN (Stereo Mini jack)
REMOTE (8-pin mini DIN)
AC Inlet
Camera (20-pin)



SONY

Camera Accessories/Peripherals

BKP-7311	30
BKP-7312	30
BKP-9057	31
BRBK-301	32
BRBK-302	32
BRBK-303	32
BRBK-304	32
BRU-300	33
BVF-20WCE	33
BVF-55CE	34
BVF-77CE	35
CA-553	36
CA-750P	37
CA-905F	38
CA-D50	39
CA-TX50P	40
CA-WR855	41
CAC-12	42
CAC-4	42
CCU-550DP	43
CCU-700AP	44
CCU-D50P	45
CCU-TX50P	46
CMA-D2	47
CMA-D2MDCE	48
CMA-D3CE	49
CNU-700	50
DXF-51	51
HDFV-C30W	52
LC-421	53
LC-DS300SFT	53
LCR-1	54
LO-23	55
LO-26	55
MSU-700A	55
MSU-750	56
RCP-700	57
RCP-750	57
RCP-751	58
RCP-D50	58
RCP-D51	59
RM-BR300	60
RM-C950	60
RMM-301	60
RM-P9	61
VCL-0716BXA	62
VCL-616WEA	62
VCS-700	63
VCT-14	64
VCT-U14	64
VFH-550	65
VFH-770	65
WLL-CA50	66
WLL-CA55	67
WLL-RX55	68

BKP-7311 SDI Output Board

SDI output board

Applicable Models
CCU-700AP Camera Control Unit

BKP-7312 SDI Input Board

SDI input board

Applicable Models
CCU-700AP Camera Control Unit

BKP-9057 Viewfinder Saddle

Features

***For mounting 7-inch type viewfinder (BVF-77/77CE, BVF-7700/7700P) on the CA-905K/905F/905L**
***Flexible panning**
***Easy handling**

*When the BKP-9057 is used, 'Picture in Picture' function of the seven-inch viewfinder does not work.

Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera

BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Installation manual (1)

MS-59/60 board (1)

VF connector cable (1)

Harness (1)

Mounting screws (1)

Specifications

Dimensions:

368 (W) x 373 (H) x 534 (D) mm

(14 1/2 x 14 3/4 x 21 1/8 inches)

(with CA-905, without viewfinder)

Mass:

2.3 kg (5 lb 1 oz)

Connectors:

Viewfinder 20-pin (to camera)

Viewfinder 25-pin (to VF)

Panning degree:

BVP-950/950P:

$\pm 90^\circ$

BVP-550/570:

$\pm 30^\circ$

(After the BKP-9057 is moved 20 mm backward and 20 mm upward, it will become $\pm 90^\circ$)



BRBK-301 Analog/RGB Component Card

Allows an analog/RGB component output for the BRC-300/BRU-300

Applicable Models

BRC-300 3-CCD Color Video Camera
BRU-300 Optical Multiplex Unit



BRBK-302 SDI Card

Allows a SDI output for the BRC-300/BRU-300

Applicable Models

BRC-300 3-CCD Color Video Camera
BRU-300 Optical Multiplex Unit



BRBK-303 Optical Multiplex Card

Allows video output, external synch, and control for the BRC-300

Applicable Models

BRC-300 3-CCD Color Video Camera



BRBK-304 DV Card

Allows a DV output for the BRC-300/BRU-300

Applicable Models

BRC-300 3-CCD Color Video Camera



BRU-300 Optical Multiplex Unit

Features

*The BRU-300 converts uncompressed digital data from the BRC-300 3CCD Color Video Camera (with the optional BRBK-303 Optical Multiplex Card) into various video outputs.

Applicable Models

BRC-300 3-CCD Color Video Camera

Supplied Accessories

AC power cable (1)

Terminal connector (1)

RS-232C cable (1)

Operating instructions (1)

Optional Accessories

RM-BR300 Remote Control Unit

BRBK-301 Analog/RGB Component Card

BRBK-302 SDI Card

CCFC-M100 Optical Fiber Cable



BVF-20WCE 2-inch Type 16:9 B/W Viewfinder

Features

*2-inch type 16:9 widescreen B/W CRT viewfinder for the portable camera *High resolution-600 TV lines at center in both 16:9 and 4:3 modes *Diagonal size is 1.5-inch in 4:3 mode and 2.0-inch in 16:9 mode to ensure easy focusing even in 16:9 mode *The eye-piece is removable from the viewfinder to allow direct view of the CRT *Tally indicators on both front and rear of the viewfinder as well as on the screen of the viewfinder *Supplied with a new external microphone



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera

BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Operation manual (1)

Optional Accessories

BKW-401 Viewfinder Rotation Bracket

Specifications

General

Power requirements:

9.3 V DC

Power consumption:

2.3 W

Operating temperature:

-20°C to +45°C (-4°F to +113°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

External dimensions:

229(W) x 76(H) x 215(D) mm

(9 1/2 x 3 x 8 1/4 inches)

Mass:

580 g (1 lb 4 oz)

Performance

CRT:

2-inch monochrome

Horizontal resolution:

600 TV lines (at center)

Indicators:

REC/TALLY, BATT, VTR, SAVE, ! (warning)

Compensation for aberrations:

-3.6D to +0.4D

BVF-55CE 5-inch Type B/W Viewfinder (CCIR)

Features

*650 TV lines of resolution at center *High brightness—600NIT *Adjustable center position marker with ON/OFF switch *Panning and tilting facility *Easy installation and handling

Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera
CA-701 Camcorder Adaptor
CA-702P Camcorder Adaptor
DNW-7 Betacam SX Camcorder
DNW-7P Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
MSW-900P MPEG IMX Camcorder

Supplied Accessories

Connecting cables (12-pin - 20-pin) (1)
Slide shoe (1)
V wedge shoe attachment (1)
Screws (1)
Monitor hood for studio use (1)

Specifications

General

Operating temperature:
-10 to +50 °C (+14 to +122 °F)
Mass:
1.9 kg (4 lb 3 oz)
External dimensions:
191(W) x 188(H) x 291(D)mm
(7 5/8 x 7 1/2 x 11 1/2 inches)

Performance

Screen size:
73(H) x 97(W)mm underscan
(2 7/8 x 3 7/8 inches)
Power requirements:
DC 12 V
Power consumption:
10 W
Resolution:
650 TV lines at center
550 TV lines at corners
Picture distortion:
Less than 3%



BVF-77CE 7-inch Type B/W Viewfinder (CCIR)

Features

- *Specifically designed for use with BVP-900/9500WS series cameras— for direct camera installation
- *Can also be attached to the CA-905 series camera adaptors
- *Compact size with reduced height, light weight and low power consumption
- *Wide range of mechanical positioning and fixed center of gravity
- *Extremely high center resolution of 800 TV lines and wide peaking range contribute to a very crisp image and accurate focusing
- *Large, very easy to see tally lamps
- *Underscan display

Applicable Models

CA-905F plus BKP-9057

Specifications

General

Power requirements:

DC 10.5 to 17.0 V DC 12.0 (typical)

Power consumption:

23 W

Mass:

5.0 kg (11 lb)

External dimensions:

265(W) x 178(H) x 321(D)mm

(10 1/2 x 7 1/8 x 12 3/4 inches)

Performance

CRT:

7-Inch 90-degree deflection

Screen size:

120(H) x 90(D) mm (normal)

(4 3/4 x 3 5/8 inches)

Tilting angle:

+60°/-40°

Brightness:

More than 500cd/m² (146fL)

Resolution:

800 lines (center)

600 lines (corner)

Geometric distortion:

Within 1.0%

Linearity:

Within 3%

Stability of raster size:

Within 2%

Controls:

Contrast/Brightness/Peaking

Peaking SW/Power

SW Scan Size SW

Aperture correction:

0 to 15 dB



CA-553 Camcorder Adaptor

Betacam 50-pin Interface Adaptor

Features

*Interface adaptor to connect cameras to BVV-5 Betacam
SP dockable VTR



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Carrying handle (1)
Operation manual (1)
Maintenance manual (1)
M4 screw (1)
+B4x5 screw (1)
Plate (1)

Specifications

Input/output connector:
68-pin (1)
50-pin (1, for video/audio control signal,
power transmission)
Power requirements:
DC 12 V
Power consumption:
0.3 W
Operating temperature:
-20 to +45°C (-40 to +113°F)
Storage temperature:
-20 to +60°C (-40 to +140°F)

Dimensions:

119 (W) x 179 (H) x 33 (D) mm
4 3/4 x 7 1/8 x 1 5/16 inches

Mass:

350 g (12.3 oz)

CA-750P Camera Adaptor

Features

*Furnished with a wideband triax cable interface for use with the CCU-700A/550 series camera control unit *High picture quality is provided through component (Y/R-Y/B-Y) transmission in the wideband triax cable *Ideal for studio use—all function switches are located at the rear in order to lower the viewfinder position and for comfortable tripod use in studios *Two channels of intercom system *Provides a 26-pin connector for interface with portable VTRs via the CCZ or CCZQ cable *Prompter output *Reverse trunk video *Interface with tracker and return switch box *Rotary type triax connector



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Triax cable holder (1)
Shoulder belt (1)
M3 x 6 screw (4)
Operation manual (1)
Maintenance manual (1)

Specifications

General

Power requirements:
DC 10.5 to 17 V
Power consumption:
11 W
Operating temperature:
-20 to +45 °C (-4 to +113 °F)
Storage temperature:
-20 to +50 °C (-4 to +122 °F)

Mass:

2.7 kg (5 lb 15 oz)

Dimensions:

193 (L) x 212 (H) x 130 (W) mm
(7 5/8 x 8 3/8 x 5 1/8 inches)

Connectors

Audio input:

XLR-3-pin (2, female), 600 Ω , balanced, phantom +48 V, AC +12 V

DC input:

XLR-4-pin (1, male), 10.5 to 17 V

DC output:

4-pin (1), 10.5 to 17 V, max 500 mA

Return output:

BNC (1), 1.0 Vp-p, 75 Ω

Prompter input/output:

BNC (1), 1.0 Vp-p, 75 Ω , floating

VBS genlock input:

BNC (1), 1.0 Vp-p, 75 Ω , floating

Return control:

6-pin (1)

Earphone:

Mini jack (1), 8 Ω

Camera interface:

68-pin (1)

VTR:

26-pin (1, CCZ type)

CCU (Triax):

Kings type

CCU (Coax):

BNC (option)

INCOM/PGM:

2 CH, Headset XLR 5-pin (1, female)

RCP:

8-pin (female)

Tracker:

10-pin, max. 500 mA, tally drive 50 mA

CA-905F Large Lens Adaptor (Fischer Type)

Features

*Adaptor to attach a large lens to portable cameras
 *Compact and lightweight *Easy lens attachment and detachment
 *Vertical/horizontal adjustment *Stabilizing mechanism for complete matching with the lens mount and the camera position
 *Combined use with 7-inch type viewfinder (with BKP-9057 viewfinder saddle) provides a wide range of applications

*CA-905 can not be used in the following combination of a viewfinder and a CCU
 —CA-905+BVF-7700/7700P and CCU-550A/550AP



Lens, camera, camera adaptor, viewfinder, VF saddle, tripod are optional

Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
 BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Number plate (2)
 Cable clamp (2)
 Operation manual including BKP-9057 operation (1)
 Maintenance manual part 1 (1)

Specifications

General

Power Consumption:
 90 W (w/ lens, VF and BKP-9057)
 Operation temperature:
 -20 to + 45 °C (-4 to 113°F)
 Storage temperature:
 -20 to + 55°C (-4 to 130°F)
 Mass:
 12 kg (26 lb 7 oz)
 Dimensions:
 368 x 327 x 534 mm
 (14 1/2 x 12 7/8 x 21 1/8 inches)

Connectors

CCU:
 Triax (Fischer type)
 Lens:
 12-pin (to camera)
 Lens:
 36-pin (to lens)
 Command:
 8-pin (to camera)

CA-D50 Camera Adaptor

Features

*Camera Adaptor for use with the CCU-D50/D50P Camera Control Unit. *Dockable to Sony DXC cameras that employ the 76-pin digital connector *Interfaces with 26-pin equipped Sony portable VTRs *Interfaces with the BKP-L551 Battery Adaptor with the appropriate service part.(*)

(*)Please contact your nearest Sony office.

Applicable Models

DXC-D50PH 3-chip CCD Portable Color Camera

DXC-D50PK 3-chip CCD Portable Color Camera

DXC-D50PL 3-chip CCD Portable Color Camera

DXC-D50WSPL 3-chip CCD Portable Color Camera

Supplied Accessories

Operation manual (1)

Optional Accessories

CCZ-A Cables 26-pin/26-pin Cable

Specifications

General

Power requirements:

DC 12 V

Power consumption:

Approx. 3.8 W

Operating temperature:

-10°C to 45°C (14°F to 113°F)

Storage temperature:

-20°C to 55°C (-4°F to 131°F)

Dimensions:

113 (W) × 183 (H) × 168 (D) mm

(7 1/4 × 4 1/2 × 6 5/8 inches)

Mass:

1.1 kg (2 lb 7 oz)

Input/Output connectors

Camera interface:

Pro 76-pin DIGITAL (1)

CCU/VTR/CMA:

Sony Z-type 26-pin (1)

SDI output:

BNC (1), 270 Mb/s, 0.8 Vp-p, 75 Ω

Genlock/Prompter output:

BNC (1), 1.0 Vp-p, 75 Ω

Earphone

Mini jack

Intercom:

Mini intercom jack

DC input:

XLR 4-pin (1), 10.5 to 17.0 V



CA-TX50P Camera Adaptor

The CA-TX50P is a triax camera adaptor for use with the DXC-D50P series portable video cameras for connection with the CCU-TX50P Triax Camera Control Unit.



Applicable Models

CCU-TX50P Camera Control Unit
DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera

Supplied Accessories

Operation manual (1)

Optional Accessories

AC-DN10 AC Adaptor/Charger
WRR-861A UHF Synthesized Diversity Tuner (AU)
WRR-862A UHF Synthesized Dual Diversity Tuner (AU)
DXF-51 5-inch Monochrome Viewfinder

Specifications

Power requirements:

DC 12 V (DC 180 V when supplied via the CCU connector)

Power consumption:

CA (Internal): 7.3 W
Max. 58 W (DC 12 V input)
Max. 67 W (DC 180 V input)

Operating temperature:

-10 °C to 45 °C (14 °F to 113 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Mass:

Approx. 2.5 kg (5 lb 5 oz)

Dimensions (W x H x D):

206 x 212 x 131 mm
(8 1/8 x 8 3/8 x 5 1/4 inches)

Signal inputs/outputs

CCU:

Triax (Fischer type)

CAMERA:

Pro 76-pin Digital

PROMPTER:

BNC type, 1.0 Vp-p, 75 Ω

RETURN:

BNC type, 1.0 Vp-p, 75 Ω

INTERCOM/PROGRAM:

XLR 5-pin (for Headset)

Input level: -60 dBs (dynamic)
Output level: -∞ to +12 dBs

AUDIO IN (CH-1/2):

XLR 3-pin (2), 600 Ω, balanced
Input level:
Mic in: -60 dB
Line in: -20 dB

DC IN:

XLR 4-pin, 10.5 V to 17 V

DC OUT:

4-pin, 10.5 V to 17 V, Max 1.5 A

EARPHONE

Mini jack

CA-WR855 Camera Adaptor

Features

*Allows a WRR-855A/855B to be mounted on Sony DSR-390/570WS DVCAM camcorders *Direct audio/power connection interfaces

Applicable Models

WRR-855B UHF Synthesized Diversity Tuner (6668U)



CAC-12 Camera Microphone Holder

Features

*Allows microphone direction to be adjusted * For attaching the ECM-647/670 or the C-74 condensor microphone to cameras and camcorders

Applicable Models

DSR-250 DVCAM Camcorder
DSR-250P DVCAM Camcorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-PDX10 DVCAM Camcorder
DSR-PDX10P DVCAM Camcorder
DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera



CAC-4 Chest Pad

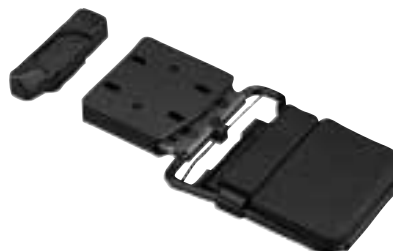
Features

*Provides more stable camera operation *Attachable to the VCT-U14 tripod adaptors directly

Specifications

Mass:

Approx. 185 g (7 oz)



CCU-550DP Camera Control Unit

Features

*Wideband triax transmission—with the advantage of avoiding differential time delays and differential gain via a component (R-Y/Y/B-Y) transmission system *With component SDI outputs (BNC type) *Remote operation of up to 2000 m for wideband transmission and up to 3000 m for normal bandwidth transmission (option) with $\phi 14.5$ mm triax cable *Built-in bi-directional teleprompter video channel *Mono color function available to VBS and Y, R-Y and B-Y outputs *With character display function *Built-in contrast and saturation functions *Flexible intercom system—two channels for producer/engineer and 4W or RTS or 2W selectable by internal switch *MIC gain (camera head) remote controllable *Flickerless sequential mode (R/G/B) standard for WFM output *Directly interfaces with MSU-700A/750, CNU-700/500 and RCP-700 series *19-inch rack mountable



Applicable Models

BVP-E30 3-chip CCD Portable Color Camera
BVP-E30WS 3-chip CCD Portable Color Camera

Supplied Accessories

AC power cord (1)
Plug holder for the AC power cord (1)
4-pin connectors (1)
19-pin connectors (1)
Number plate [set] (1)
Operation manual (1)
Maintenance manual (1)

Optional Accessories

BKP-7312 SDI Input Board

Specifications

General

Power requirements:
AC 120 V $\pm 10\%$, 50/60 Hz
Power consumption:
Max 450 VA
Operating temperature:
0 to +45°C (+32 to +113° F)
Mass:
19 kg (41 lb 14 oz)
Dimensions:
424(W) x 133(H) x 400(D)mm
(16 3/4 x 5 1/4 x 15 3/4 inches)

Input signals

Return video 1, 2 in *1(3, 4):
BNC, loop-through, 1.0 Vp-p, 75 Ω
Reference input:
BNC, loop-through, VBS, 1.0 Vp-p, 75 Ω
Prompter input:
BNC, loop-through, 1.0 Vp-p, 75 Ω

Output signals

Encoded video output:
BNC (3), VBS, 1.0 Vp-p, 75 Ω
Component SDI:
BNC (2), 270 Mb/s
R/G/B output:
BNC, 700 mVp-p, 75 Ω

Y/R-Y/B-Y output:

Y: 1.0 Vp-p (video: 0.714, sync: 0.286), 75 Ω
R-Y: 0.7 Vp-p, 75 Ω
B-Y: 0.7 Vp-p, 75 Ω

Waveform monitor output:

BNC (2), 0.714 Vp-p, 75 Ω

Picture monitor output:

BNC (2), 1.0 Vp-p, 75 Ω

Character video output

Video:

BNC, 3 Vp-p

Sync:

BNC, 0.286 Vp-p

Sync output (analog BNC):

0.3 Vp-p, negative, 75 Ω

Mic out (2-CH, XLR 3-pin)

0 dB/-20 dB selectable

Input/output signals

Camera

Triax:

Kings type (1)

Coax:

BNC (1)

Communication

Intercom (RTS):

XLR-3-pin, loop-through

Intercom (4W/2W)/Tally/PGM:

19-pin

Intercom PGM (front panel):

XLR-5-pin

Remote control

Remote:

8-pin

AUX:

8-pin

Others

WF mode:

4-pin

Microphone gain remote control:

D-sub 15-pin

Intercom remote control:

D-sub 25-pin

*Available with option

CCU-700AP Camera Control Unit

Features

*Wideband triax transmission—with the advantage of avoiding differential time delays and differential gain via a component (R-Y/Y/B-Y) transmission system *With component SDI outputs (BNC type) (option) *Remote operation of up to 2000 m for wideband transmission and up to 3000 m for normal bandwidth transmission (option) with $\phi 14.5$ mm triax cable *Built-in bi-directional teleprompter video channel *Mono color function available to VBS and Y, R-Y and B-Y outputs *With character display function *Built-in contrast and saturation functions *Flexible intercom system—two channels for producer/engineer and 4W or RTS or 2W selectable by internal switch *Microphone gain (camera head) remote controllable *Flickerless sequential mode (R/G/B) standard for WFM output *Directly interfaces with MSU-700A/750, CNU-700 and RCP-700 series *19-inch rack mountable



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

AC power cord (1)
Plug holder for the AC power cord (1)
4-pin connectors (1)
19-pin connectors (1)
Number plate (1)
Operation manual (1)
Maintenance manual (1)

Optional Accessories

BKP-7311 SDI Output Board
BKP-7312 SDI Input Board

Specifications

General

Power requirements:
AC 110 to 120/220 to 240V \pm 10%, 50/60 Hz
Power consumption:
Max. 450 VA
Operating temperature:
0 to +45°C (+32 to +113° F)
Mass:
19 kg (41 lb 14 oz)
Dimensions:
424(W) x 133(H) x 400(D)mm
(16 3/4 x 5 1/4 x 15 3/4 inches)

Input signals

Return video 1, 2 in *1(3, 4):
BNC, loop-through, 1.0 Vp-p, 75 Ω
Reference input:
BNC, loop-through, VBS, 1.0 Vp-p, 75 Ω
Prompter input:
BNC, loop-through, 1.0 Vp-p, 75 Ω

Output signals

Encoded video output (BNC):
BNC (3), VBS, 1.0 Vp-p, 75 Ω
Component SDI:
BNC (2, optional), 270 Mb/s
R/G/B output:
BNC, 700 mVp-p, 75 Ω

Y/R-Y/B-Y output (BNC):

Y: 1.0 Vp-p (video:0.7, sync:0.3), 75 Ω
R-Y: 0.525 Vp-p, 75 Ω
B-Y: 0.525 Vp-p, 75 Ω

Waveform monitor output:

BNC (2), 0.7 Vp-p, 75 Ω

Picture monitor out (BNC):

BNC (2), 1.0Vp-p

Character video output:

Video:
BNC, 0.3 Vp-p
Sync:
BNC, 0.3 Vp-p

Sync output (analog BNC):

0.3 Vp-p, negative, 75 Ω

Microphone output:

2-CH, XLR 3-pin, 0 dB/-20 dB selectable

Input/output signals

Camera

Triax:
Fischer type (1)
Coax:
BNC (1)

Communication

Intercom (RTS):

XLR-3-pin, loop-through
Intercom (4W/2W)/Tally/PGM:
19-pin

Intercom PGM (front panel):

XLR-5-pin

Remote control

Remote:

8-pin

AUX:

8-pin

Others

WF mode:

4-pin

Microphone gain remote control:

D-sub 15-pin

Intercom remote control:

D-sub 25-pin

CCU-D50P Camera Control Unit

Features

*Interfaces with Sony DXC-D50P Series digital cameras via its associated CA-D50 Camera Adaptor. *The output of the CA-D50 Camera Adaptor is transferred to the CCU-D50P Camera Control Unit as a component digital SDI(*1) signal via a Sony CCZ-A 26-pin cable up to 75 m long. *The distance between the CA-D50 Camera Adaptor and CCU-D50P Camera Control Unit can be extended to a maximum 200 m by providing a separate low loss coaxial video cable to carry the SDI signal between the two units. * Outputs analog composite and one of the following: component digital SDI, analog component (Y/R-Y/B-Y or RGB), or S-video(*2). * Flexible intercom connectivity allows the interfacing of 2-wire or 4-wire systems. *Green tally indication included for use in mid to large-scale camera operations. *The RCP-D50 or the RM-M7G can be connected to the CCU-D50P.

(*1) Embedded audio is not supported. (*2) Available output signals depend on the connected camera or camcorder.



Applicable Models

DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera

Supplied Accessories

AC power cord (1)
Rack mount adaptor (2)
Rack mount screw (4)
Tally indication segment (1)
Operation manual (1)

Optional Accessories

RCP-TX7 Remote Control Panel
RM-M7G Remote Control Unit
CCZ-A Cables 26-pin/26-pin Cable

Specifications

General

Power requirements:
AC 200/240 V, 50/60 Hz
Power consumption:
Approx. 0.8 A
Operating temperature:
5°C to 40°C (41°F to 104°F)
Storage temperature:
-20°C to 55°C (-4°F to 131°F)
Dimensions:
424 (W) × 88 (H) × 283 (D) mm
(16 3/4 × 3 1/2 × 11 1/4 inches)
Mass:
6.3 kg (13 lb 14 oz)

Input/Output connectors

VBS output:
BNC (2) 1.0 Vp-p, 75 Ω

R/G/B output:

BNC (1) 0.7 Vp-p, 75 Ω

Y/R-Y/B-Y output:

BNC (1), Y: 1.0 Vp-p, 75 Ω, R-Y/B-Y: 0.525 Vp-p, 75 Ω

Y/C output:

BNC (1) Y: 1.0 Vp-p, 75 Ω, C: 0.3 Vp-p, 75 Ω

SYNC output:

BNC (1), 0.3 Vp-p, 75 Ω

SDI output:

BNC (2), 270 Mb/s, 0.8 Vp-p, 75 Ω

S-Video output:

DIN 4-pin (1), Y: 1.0 Vp-p, 75 Ω, C: 0.3 Vp-p, 75 Ω

Monitor output:

BNC (1) VBS:1.0Vp-p, 75Ω

Mic output:

XLR 3-pin (1), 600Ω

Genlock input:

BNC (1), loop-through, VBS or BBS, 1.0 Vp-p, 75Ω

SDI input:

BNC (1), 270 Mb/s, 0.8 Vp-p, 75 Ω

Return Video input:

BNC (1), loop-through, 1.0 Vp-p, 75 Ω

Prompter Video input:

BNC (1), loop-through, 1.0 Vp-p, 75 Ω

Camera:

Sony Z-type 26-pin (1)

Intercom/Tally:

D-sub 15-pin, 4W/2W selectable, R/G Tally, contact

Remote:

10-pin (1)

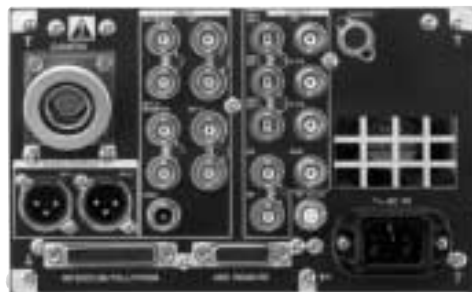
Control functions

Iris (auto/manual), White Balance (auto/manual/preset), Black balance (auto/manual/preset), Gain select (low/mid/high), R/B White, R/B Black, Master Black, Sub-carrier Phase, Horizontal Phase, Output Mode (color bar/camera), Knee Point (auto/manual), Detail Level, Master Gamma, Tally/Intercom, Shutter Speed, Clear scan, ATW

CCU-TX50P Camera Control Unit

Features

*Compact design - half rack width and 3U height *High quality data transmission *Long distance transmission - up to 1500 meters via 14.5 mm cable *In addition to the component/RGB switchable output, three outputs switchable between composite video and SDI are provided *Component video output (selectable from Y/R-Y/B-Y and R/G/B) *Three return video inputs (One input is shared with prompter input) *Color teleprompter compatible *Red/Green tally indication *Support for major intercom systems (Four-wire/RTS/Clear-com) *Program audio input *Two-channel microphone outputs (two XLR connectors)



Applicable Models

DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera
CA-TX50P Camera Adaptor

Supplied Accessories

AC power cord (1)
AC power plug holder (1)
Plug holder for AC power cord (1)
Rack mount adaptor (2)
Rack mount screw (4)
Number plate (1)
Operation manual (1)

Optional Accessories

CA-TX50P Camera Adaptor
RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)
RMM-301 Rack Mounting Bracket

Specifications

Power requirements:
AC 100 to 240 V, 50/60 Hz
Power consumption:
130 VA (measured at maximum load at camera side 12 V, 4.8 A, cable length 300 m)
Peak inrush current
(1) Power ON, current probe method: 50 A (240 V)
(2) Hot switching inrush current, measured in accordance with European standard

DN55103-1: 10 A (230 W)
Cable length:
Max. 750 m (8.5 mm dia.)
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to 55 °C (-4 °F to 131 °F)
Mass:
Approx. 5.5 kg (12 lb 2 oz)
Dimensions (W x H x D):
200 x 124 x 365 mm (8 x 5 x 13 7/8 inches)
Signal inputs
REFERENCE: BNC type, loop-through, VBS/BS, 1.0 Vp-p, 75 Ω
RETURN VIDEO 1, 2, 3 (*1): BNC type, loop-through, 1.0 Vp-p, 75 Ω
PROMPTER VIDEO (*1): BNC type, loop-through, 1.0 Vp-p, 75 Ω
Signal outputs
VBS 1, 2, 3 (*2): BNC type, 1.0 Vp-p, 75 Ω
SDI 1, 2, 3 (*2): BNC type, 270 Mb/s, 0.8 Vp-p, 75 Ω
Y/R-Y/B-Y (*3): BNC type, Y: 1.0 Vp-p, 75 Ω, R-Y/B-Y: 525 mVp-p, 75 Ω
R/G/B (*3): BNC type, 0.7 Vp-p, 75 Ω
SYNC: BNC type, 0.3 Vp-p, 75 Ω
PIX: BNC type, VBS, 1.0 Vp-p, 75 Ω
WF: BNC type, 700 mVp-p, 75 Ω
Encoded output: 1.0 Vp-p, 75 Ω
WF MODE: 4-pin
AUDIO: XLR 3-pin, 0 dBu/-20 dBu, balanced, 2 channels
Camera control inputs/outputs
CAMERA: Triax (Fischer type)
COAX: BNC type, 75 Ω
REMOTE: 10-pin, multi connector

INTERCOM/TALLY/PGM: D-sub 25-pin, 4W/RTS/Clear-com selectable
TALLY: DC 24 V, TTL level or contact selectable
MIC REMOTE: D-sub 15-pin
INCOM (on the front panel): XLR 5-pin

(*1) The same connector is shared for return-3 and teleprompter.
(*2) The same connector is shared for composite and SDI.
(*3) The same connector is shared for component and R/G/B.

CMA-D2 Camera Adaptor

Camera adaptor for
DXC-9000/990/950/390/190/107A/LS1

Features

- *Supplies DC power with a CCDC cable to cameras
- *Transmits DC power and video/sync signals between the camera and the adaptor with a CCMC 12-pin cable
- *Maximum cable length: 100 m with CCDC-100A cable/25 m with CCMC-12P25 cable *19-inch EIA standard rack mountable



Applicable Models

DXC-390 3-CCD Color Video Camera
DXC-9000 3-CCD Color Video Camera
DXC-9100P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-LS1 CCD Color Video Camera
DXC-LS1P CCD Color Video Camera

Supplied Accessories

AC power cord (1)
Operation manual (1)

Specifications

Connectors:

CAMERA (12-pin MULTI)
CAMERA (4-pin DIN)
VIDEO OUT (BNC)
S VIDEO OUT (Mini DIN 4-pin)
GEN-LOCK IN (BNC)

DC out:

13 V, 1.3 A

Power requirements:

AC 120 V, 50/60 Hz

Power consumption:

23 W

Dimensions:

210 (W) × 50 (H) × 200 (D) mm
(8 3/8 × 2 × 7 7/8 inches)

Mass:

1.1 kg (2 lb 7 oz)

CMA-D2MDCE Camera Adaptor

Camera adaptor for DXC-9100P/990P/390P/LS1P

Features

- *Supplies DC power with a CCDC cable to cameras
- *Transmits DC power and video/sync signals between the camera and the adaptor with a CCMC 12-pin cable
- *Maximum cable length: 100 m with CCDC-100A cable/25 m with CCMC-12P25 cable *19-inch EIA standard rack mountable
- *Complies with medical safety standard



Applicable Models

DXC-990P 3-CCD Color Video Camera

Supplied Accessories

- AC power cord (1)
- Operation manual (1)

Specifications

Connectors:

- CAMERA (12-pin MULTI)
- CAMERA (4-pin DIN)
- VIDEO OUT (BNC)
- S VIDEO OUT (Mini DIN 4-pin)
- GEN-LOCK IN (BNC)

DC out:

13 V, 1.3 A

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

24.5 W

Dimensions:

210 (W) × 50 (H) × 200 (D) mm
(8 3/8 × 2 × 7 7/8 inches)

Mass:

1.1 kg (2 lb 7 oz)

CMA-D3CE Camera Adaptor

Features

*Supplies DC power and transmits video/sync signal between the adaptor and the DXC-390P with CCZ-A cable and CCMC-3MZ cable *Connects with optional RM-C950 remote control unit *AC IN/DC IN

Applicable Models

DXC-390P 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera

Supplied Accessories

Operation manual (1)
AC cable (1)

Specifications

Connectors

CAMERA (26-pin MULTI)
VIDEO OUT (BNC)
SYNC IN / OUT (BNC)
TRIG INPUT (BNC)
W. E OUTPUT (BNC)
REMOTE (mini DIN 8 pin)

Power requirements:

AC 100-240 V or
DC (10.5 to 15.0 V)

Dimensions:

210 (W) × 44 (H) × 210 (D) mm



CNU-700 Camera Command Network Unit

Features

*High-speed data transmission rates — more than 500 kb/s between CNU and MSU/RCP/CCU and 35 kb/s between camera head and CCU *Expandable system configuration — up to 12 cameras with one CNU-700 and one BKP-7930 installed *Character display function in monochrome *Bypass facility to maintain communication between the CCUs and RCPs in the event of a CNU malfunction or power loss



Supplied Accessories

AC power cord (1)
Plug holder for the AC power cord (1)
Operation manual (1)
Maintenance manual (1)

Optional Boards

BKP-7930 Expansion Board
BKP-7933 S-Bus Interface Board



Specifications

General

Power requirements:

AC 100 to 120 V, 50/60 Hz (For USA and Canada)

AC 220 to 240 V, 50/60 Hz (For other countries)

Power consumption:

4.0 VA max.

Operating temperature:

0 to +45 °C (+32 to +113 °F)

Mass:

9.5 kg (20 lb 15 oz)

Dimensions:

424(W) x 132(H) x 400(D) mm

(16 3/4 x 5 1/4 x 15 3/4 inches)

Input/output connectors

CCU 1 through 6:

8-pin multiconnector (1 each)

RCP 1 through 6:

8-pin multiconnector (1 each)

MSU:

8-pin multiconnector (1)

VCS:

8-pin multiconnector (1)

AUX 1 and 2:

8-pin multiconnector (1 each)

Character:

BNC type (2) video: 0.7 Vp-p, sync: 0.3

Vp-p

Reference:

BNC type (2) 0.3 Vp-p with loop-through output

RS-232C:

D-sub 9-pin (3)

AC input:

3-pin (1)

DXF-51 5-inch Monochrome Viewfinder

Features

*High horizontal resolution of 650 TV lines *Stable video image *Bright and clear color image *Under Scanning capability *Can operate either on EIA and CCIR signals systems with automatic selection *16:9/4:3 Automatic Aspect Ratio Selection *The viewfinder aspect ratio of the DXF-51 is automatically switched between 16:9 and 4:3 *Two red REC tally lamps *Green Tally Lamp which can be used as a second tally lamp for CCU operations *20-pin connector for DXC-D35/D35P/D35WS/D35WSP *DIN 8-pin connector for DXC-327B/327BP/637/637P etc. *+/- 40 degrees of tilting is possible *+/- 90 degrees of panning is possible *Rugged and compact body



Applicable Models

DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera

Supplied Accessories

Hood (1)
Operation manual (1)
20-pin Cable (1)

Specifications

Picture tube:

5-inch monochrome, 70° deflection

Scanning system:

2:1 interlace, 625/50 or 525/59.94 switchable

Horizontal resolution:

650 TV lines (center)

Camera connector:

20-pin or DIN 8-pin connector

Power requirements:

DC 12 V +5.0/-1.5 V (supplied from a camera)

Power consumption:

11 W

Operating temperature:

0°C to 40°C (32°F to 104°F)

Mass:

2.4 kg (5 lb 5 oz) with stand and hood

Dimensions:

202 (H) × 199 (W) × 217 (D) mm
(8 × 7 7/8 × 8 5/8 inches)

including projecting parts and controls

202 (H) × 199 (W) × 289 (D) mm
(8 × 7 7/8 × 11 1/2 inches)

with stand and hood

HDVF-C30W Multi-format HD Color LCD Viewfinder

Features

*For use with the HDC-950/930 and HDW-F900/750/730/700A *The high quality 2.7-inch type TFT color LCD panel provides a high resolution of 960 pixels horizontally (equivalent to 540 TV lines) x 540 pixels vertically *Accommodates multiple frame rates *The 2x magnification function simplifies focus operation, especially when prime lenses are used *Gray scale signals can be generated, allowing camera operators to easily adjust exposure to the appropriate level *A detachable eyepiece design allows the user to directly view the LCD *Light weight construction *Very low power consumption



Applicable Models

HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900H HDCAM Camcorder

Supplied Accessories

Operation manual (1)
Connecting cable (1)

Specifications

General

Power supply:
DC 10.5 to 17.0 V (supplied by the camera)
Power consumption:
5.2 W
Operating temperature:
0 °C to 45 °C (32 °F to 115 °F)
Storage temperature:
- 20 °C to 60 °C (- 4 °F to 140 °F)
Mass:
850 g (1 lb 14 oz)

LCD

2.7-inch type color TFT screen
Image display area dimensions:
59.04 (H) x 33.21 (V) mm (2 3/8 x 1 5/16 inches)

Performance

Brightness:
300 cd/m²
Resolution:
500 or more lines
Supported formats:
Effective scanning lines/Format/Horizontal
scanning frequency/Vertical scanning frequency
1080/23.98PsF/26.97 kHz/47.95 Hz
1080/24PsF/27 kHz/48 Hz
1080/25PsF/28.13 kHz/50 Hz
1080/29.97PsF/33.72 kHz/59.94 Hz
1080/30PsF/33.75 kHz/60 Hz
1080/50i/28.13 kHz/50 Hz
1080/59.94i/33.72 kHz/59.94 Hz
1080/60i/33.75 kHz/60 Hz
Color temperature:
6500 K
Indicators:
R TALLY/G TALLY/BATT/ MAG/SAVE/I
Input signals:
Pb, Pr: 0.7 Vp-p, asynchronous, 75 Ω terminated
Y: 1.0 Vp-p, synchronous, 75 Ω terminated

LC-421 Carrying Case

Features

*Can hold the

DXC-D50/D50P/D50WS/D50WSP/D35/D35P/D35WS/D35WSP/637/637P/327B/327BP in camcorder configuration with DSR-1/1P, PVV-3/3P, EVV-9000/9000P

Applicable Models

DSR-390K1 DVCAM Camcorder

DSR-390K2 DVCAM Camcorder

DSR-390L DVCAM Camcorder

DXC-D50H 3-chip CCD Portable Color Camera

DXC-D50K 3-chip CCD Portable Color Camera

DXC-D50L 3-chip CCD Portable Color Camera

DXC-D50PH 3-chip CCD Portable Color Camera

DXC-D50PK 3-chip CCD Portable Color Camera

DXC-D50PL 3-chip CCD Portable Color Camera

DXC-D50WSL 3-chip CCD Portable Color

Camera

DXC-D50WSPL 3-chip CCD Portable Color

Camera

Specifications

Dimensions:

790 (W) × 440 (H) × 340 (D) mm

(31 1/8 × 17 3/8 × 13 1/2 inches)

Mass:

7.7 kg (17 lb)



LC-DS300SFT Soft Carrying Case

Features

*Direct pack with accessories attached: Battery pack, Microphone, Viewfinder and Zoom lens. *Easy to pack a variety of accessories such as Battery charger and other items.

Applicable Models

DSR-400PK DVCAM Camcorder

DSR-400PL DVCAM Camcorder

Specifications

Mass:

3.5 kg (7 lb 11 oz)

Dimensions (w/h/d):

220 × 300 × 620 mm

(without projection)

(8 3/4 × 11 7/8 × 24 1/2 inches)



LCR-1 Camera Rain Cover

Features

*Transparent material used to operate camera and VTR switches with the LCR-1 on

Applicable Models

BVP-9500WS Super Motion Video Camera
BVP-9500WSP Super Motion Video Camera
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-570WSPL DVCAM Camcorder
DXC-D50H 3-chip CCD Portable Color Camera
DXC-D50K 3-chip CCD Portable Color Camera
DXC-D50L 3-chip CCD Portable Color Camera
DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera

Specifications

Mass:

260 g (9 oz)



LO-23 Flexible Cable Unit

Features

*Servo zooming and manual focusing for Fujinon Lens, such as VCL-916 BYA and VCL-714BXA

Specifications

Cable length:

1 m (3.3 ft)

Mass:

1.2 kg (2 lb 10 oz)



LO-26 Flexible Cable Unit

Features

*Servo zooming and manual focusing for Canon Lenses, such as VCL-918BY

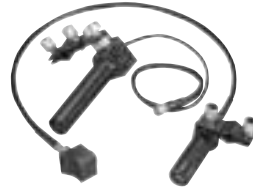
Specifications

Cable length:

1 m (3.3 ft)

Mass:

1.1 kg (2 lb 7 oz)



MSU-700A Master Setup Unit

Features

*Successor of MSU-700 *New CPU adopted to realize high-speed digital control *32 scene files capability
* Built-in software for use in HDTV camera system
*A single MSU-700A can set up 24 camera/CCU units with two CNU-700s and four VCS-700s *The unit is connected to CCU or a Camera Command Network Unit (CNU) which is connected to CCU by a special cable of up to 200 m (656 feet) in length and controls the camera functions



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera

Dimensions:

482(W) x 222(H) x 67(D) mm
(19 x 8 3/4 x 2 3/4 inches)
including projecting parts and controls

Mass:

4.5 kg (9 lb 15 oz)

Supplied Accessories

Operation manual (1)
Maintenance manual Part 1 (1)

Inputs/outputs

Remote
CCU/CNU:
8-pin multiconnector (1)
AUX:
8-pin multiconnector (1)

Specifications

General

Power requirements:
100 to 240 V AC, 50/60 Hz
Current consumption:
0.45 A
Operating temperature:
0 to 45°C (32 to 113°F)
Maximum cable length:
200 m (656 feet)

I/O port:
50-pin (1)
AC input:
3-pin (1)

MSU-750 Master Setup Unit

Features

*Master setup unit with powerful features in a compact size (same as RCP-721 x 2) *Space-saving, suitable for OB van application *New RISC CPU adopted for high-speed digital control *Built-in software for use in HDTV camera system *Enhanced control menu on the touch panel *32 scene files capability *A single MSU-750 can set up 24 camera/CCU units with two CNU-700s and four VCS-700s *No fuse or power supply cable is bundled

Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera

Supplied Accessories

Operation Manual (1)
Maintenance Manual Part 1 (1)

Specifications

General

Power requirements:

100 to 240 V AC, 50/60 Hz

Current consumption:

0.4 A

Operating temperature:

0 to 45°C (32 to 113°F)

Maximum cable length:

200 m (656 feet)

Dimensions:

204 (W) x 354(H) x 67(D) mm

(8 1/8 x 14 x 2 3/4 inches)

including projecting parts and controls

Mass:

Approx. 3.5 kg (7 lb 11 oz)

Inputs/outputs

Remote

CCU/CNU:

8-pin multiconnector (1)

AUX:

8-pin multiconnector (1)

AC input:

3-pin (1)



RCP-700 Remote Control Panel (Joystick Type)

Features

*Controls Painting (black and white), Master Black and Iris
Control menus for daily operation *Basically used as a
sub control panel to support MSU-700A/750 or
RCP-740/741/730/731/720/721 in combination with
MSU-700A/750 *Up to six units of RCP-700/701 can be
mounted on a 19-inch rack drawer

Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Plug, 6-pin Male (1)

Specifications

Connectors

Remote:
CNU/CCU (8-pin)

Preview:
6-pin

General

Mass:
1.0 kg (2 lb 3 oz)

Dimensions:
68(W) x 221(H) x 127(D) mm
(2 3/4 x 8 3/4 x 5 inches)



RCP-750 Remote Control Panel (Joystick type)

Features

*Small size with full paint control *LCD panel for fully
accessible menu system *Color LCD panel can provide
full painting control items for camera *Memory Stick
operation (Up to 64 MB type can be used) *Parallel
control function with MSU-700A/750 is available



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color
Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera
WLL-RX55 Wireless Camera Receiver

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control
Cable

Specifications

General

Power requirements:
DC 10.5 to 35 V
Power consumption:
4 W max.
Maximum cable length:
200 m (656 feet) with CCU/HDCU connected
Operating temperature:
5°C to 40 °C (41°F to 104°F)
Mass:
1.5 kg (3 lb 5 oz)

Dimensions:

102 mm x 354 mm x 126.5 mm (4 1/8 x 14 x
5 inches)

Inputs/Outputs

Remote:
CCU/CNU: 8-pin x 1
AUX : 8-pin x 1
EXT I/O:
9-pin x 1

RCP-751 Remote Control Panel (Dial control type)

Features

*Small size with full paint control *LCD panel for fully accessible menu system *Color LCD panel can provide full painting control items for camera *Memory Stick operation (Up to 64 MB type can be used) *Parallel control function with MSU-700A/750 is available



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera
WLL-RX55 Wireless Camera Receiver

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements:
DC 10.5 to 35 V
Power consumption:
4 W max.
Maximum cable length:
200 m (656 feet) with CCU/HDCU connected
Operating temperature:
5°C to 40 °C (41°F to 104°F)
Mass:
1.3 kg (2 lb 14 oz)

Dimensions:

102 mm x 354 mm x 86.5 mm (4 1/8 x 14 x 3 1/2 inches)

Inputs/Outputs

Remote:
CCU/CNU: 8-pin x 1
AUX : 8-pin x 1
EXT I/O:
9-pin x 1

RCP-D50 Remote Control Panel (Joystick Type)

Features

*Covers the complete range of camera control functions
*Provides Joystick operation *3.5-inch (*1) LCD screen with touch panel function *Allows incoming camera image to be monitored on LCD panel (*2) *Memory Stick system — various scene files can be stored on/recalled from the Memory Stick media and loaded to a different RCP-D50/D51 or DXC-D50

(*1) Viewable area measured diagonally. (*2) When used with a CCU-TX7/TX7P camera control unit, please ask Sony representative.



Applicable Models

DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera

Supplied Accessories

CCA-7-5 Connecting Cable (5 m) (1)
Operation Manual (1)
Screws and Washers (2)
Number Plate (1)

Optional Accessories

CCA-7 Cables 10-pin/10-pin Cable

Specifications

Power requirements:
10 to 17 V
(supplied from camera or CCU)
Power consumption:
4.0 W
Operating temperature:
+5°C to 40°C (41°F to 104°F)
Storage temperature:
-20°C to 55°C (-4°F to 131°F)
Dimensions:
102 (W) x 74 (D) x 354 (D) mm
(4 1/8 x 3 x 14 inches)
Mass:
Approx. 1.5 kg (3 lb 5 oz)

RCP-D51 Remote Control Panel (Dial Control Type)

Features

- *Covers the complete range of camera control functions
- *Provides Encoder operation
- *3.5-inch (*1) LCD screen with touch panel function
- *Allows incoming camera image to be monitored on LCD panel (*2)
- *Memory Stick system — various scene files can be stored on/recalled from the Memory Stick media and loaded to a different RCP-D50/D51 or DXC-D50

(*1) Viewable area measured diagonally. (*2) When used with a CCU-TX7/TX7P camera control unit, please ask Sony representative.

Applicable Models

DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera

Supplied Accessories

CCA-7-5 Connecting Cable (5 m) (1)
Operation Manual (1)
Screws and Washers (2)
Number Plate (1)

Optional Accessories

CCA-7 Cables 10-pin/10-pin Cable

Specifications

Power requirements:

10 to 17 V
(supplied from camera or CCU)

Power consumption:

4.0 W

Operating temperature:

+5°C to 40°C (41°F to 104°F)

Storage temperature:

-20°C to 55°C (-4°F to 131°F)

Dimensions:

102 (W) x 74 (D) x 354 (D) mm
(4 1/8 x 3 x 14 inches)

Mass:

Approx. 1.3 kg (2 lb 14 oz)



RM-BR300 Remote Control Unit

Features

*Easy-to-use and ergonomic joystick design *Feature-rich control panel

Applicable Models

BRC-300 3-CCD Color Video Camera
BRU-300 Optical Multiplex Unit

Supplied Accessories

AC adaptor (1)
AC power cable (1)
RS-232C cable (1)
Terminal connector (2)
Operating instructions (1)



RM-C950 Remote Control Unit

Features

*Full remote control of the DXC-9000/950/ H10/390/990 camera functions and lens zoom/ focus/iris functions via RS-232C *Facilitated operation with knob control of gain, detail, master pedestal, red and blue gain functions
*Power is supplied through the DXC-9000/ 950/990 connected to the CMA-D2 Camera Adaptor or CCU-M5 Remote Control Unit *Power is supplied through the DXC-H10 connected to the CMA-H10 Camera Adaptor

Applicable Models

DXC-390 3-CCD Color Video Camera
DXC-390P 3-CCD Color Video Camera
DXC-9000 3-CCD Color Video Camera
DXC-9100P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera
DXC-C33 3-CCD Color Video Camera
DXC-C33P 3-CCD Color Video Camera
DXC-H10 3-CCD Color Video Camera

Supplied Accessories

Connection cable (3 m) (1)
Operation manual (1)

Specifications

Power requirements:
DC 12 V (supplied from DXC-9000/950 connected to CMA-D2 or CCU-M5)
Operating temperature:
-5 to 45°C (23 to 113°F)
Connectors:
CAMERA (8-pin)
Mass:
Approx. 400 g (14 oz)
Dimensions:
212 (W) × 41 (H) × 132 (D) mm
(8 3/8 × 1 5/8 × 5 1/4 inches)
(excluding projecting parts and controls)



RMM-301 Rack Mounting Bracket

Rack Mounting Bracket for CCU-350/355/550 series

Specifications

Dimensions:

482(W) x 132(H) x 330(D)mm
(19 1/8 x 5 1/4 x 13 inches)

Mass:

4.7 kg (10 lb 6 oz)



RM-P9 Remote Control Unit

Features

*Designed to control field portable cameras such as DVW-790WS/709WS/707 series, BVW-D600 series and DNW-7/9WS/90/90WS series camcorders

Applicable Models

DNW-7 Betacam SX Camcorder
DNW-7P Betacam SX Camcorder
DNW-90WS Betacam SX Camcorder
DNW-9WS Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
DVW-707P Digital Betacam Camcorder
DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder

Supplied Accessories

6-pin remote control cable (10 m) (1)
Operation and maintenance manual (1)

Specifications

Power consumption:

0.5 W

Mass:

0.5 kg (1 lb 2 oz)

Dimensions:

86(W) x 179(H) x 65(D)mm
(3 1/2 x 7 1/8 x 1 7/8 inches)

Remote control connector:

6-pin

Output connector:

BNC type



VCL-0716BXA 1/2 Type Bayonet Mount Lens



Applicable Models

DXC-9000 3-CCD Color Video Camera
DXC-9100P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera

Supplied Accessories

Lens cap (front) (1)
Operation manual (1)
Lens cap (rear) (1)

Specifications

Type
1/2 type
Focal length
7.3 to 117 mm
Zoom ratio
16x
Maximum relative aperture
F1.9 (7.3 to 98 mm) to F2.3 (117 mm)

Flange focal length (in air)
38 mm (adjustable range: +/-0.3 mm)
Minimum object distance
1 m (0.04 m in macro operation)
Angle of view
Horizontal: 47°20' to 3°08'
Vertical: 36°24' to 2°21'
Diagonal: 57°26' to 3°55'
Iris control
Manual, Auto, Remote control from camera or control box
Zoom control
Manual, Remote control from control box
Focus control
Manual, Remote control from control box
Power requirements
DC 12 V
Current consumption
70 mA (Quiescent), 350 mA (Maximum)

Mount
Bayonet mount
Mass
Approx. 870 g (1 lb 15 oz)
Dimensions (W x H x D)
90.5 x 75 x 144.2 mm (3 5/8 x 3 x 5 3/4 inches), without lens hood

* Zoom/Focus/Iris functions can be remotely controlled from RM-C950.

VCL-616WEA 1/3 Type C-mount Lens



Supplied Accessories

Lens hood (1)
Lens cap (front) (1)
Lens cap (rear) (1)
Operation manual (1)

Specifications

Application
1/3 type format 3CCD color camera
Focal length
5.5 to 88 mm
Zoom ratio
16x
Maximum relative aperture
F1.4 (5.5 mm) to F1.8 (88 mm)
Iris range
F1.4 to F16, closed

Flange focal length (in air)
17.526 +/-0.05 mm (adjustable range: +/-0.20 mm)
Minimum object distance
1.0 m
Angle of view
Horizontal: 47°09' to 3°07'
Vertical: 36°15' to 2°21'
Iris control
Manual, Auto, Remote control from camera or control box
Zoom control
Manual, Remote control from control box
Focus control
Manual, Remote control from control box
Power requirements
DC 12 V
Maximum current consumption
400 mA

Mount
C mount
Mass
Approx. 900 g (1 lb 16 oz), without lens hood
Dimensions (W x H x D)
100 x 108 x 198.8 mm (4 x 4 1/4 x 7 7/8 inches)

VCS-700 Video Selector

Features

*Routes video output of multiple cameras for picture and waveform monitoring *Accepts up to six picture and waveform inputs *Video output selectable from the MSU-700A/750 or external control equipment through the 37-pin I/O port *Two picture and waveform outputs available for different system applications



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

AC power cord (1)
Plug holder for the AC power cord (1)
4-pin connector (1)
Operation manual (1)
Maintenance manual (1)

Specifications

General

Power requirements:
220 to 240 V AC, 50/60 Hz
Power consumption:
0.28 VA
Operating temperature:
5 to +45 °C (73 to +113 °F)
Mass:
5.2 kg (11 lb 7 oz)

Dimensions:

424(W) x 44(H) x 400(D)mm
(16 3/4 x 1 3/4 x 15 3/4 inches)

Input connectors

PIX 1 to PIX 6 input:
BNC type (6)
WF 1 to WF 6 input:
BNC type (6)
1.0 Vp-p(VBS)/0.7 Vp-p(V), 75 Ω
PIX A input:
BNC type (1) 1.0 Vp-p(VBS), 75 Ω
WF A input:
BNC type (1) 1.0 Vp-p(VBS), 75 Ω
CHARACTER input:
BNC type (1, with loop-through output)
0.7 Vp-p(V), 75 Ω
AC in:
3-pin

Output connectors

PIX A and PIX B output:
BNC type (1 each), 1.0 Vp-p(VBS), 75 Ω
WF A and WF B output:
1.0 Vp-p(VBS)/0.7 Vp-p(V), 75 Ω

SYNC output:

BNC type (1)
0.3 Vp-p(VBS), 75 Ω, negative polarity

WF mode:

round 4-pin connector (1)

Remote connectors

REMOTE:
8-pin multiconnectors (1)

I/O PORT:

D-sub 37-pin(1)

VCT-14 Tripod Adaptor



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera
DNW-7 Betacam SX Camcorder
DNW-7P Betacam SX Camcorder
DNW-90WS Betacam SX Camcorder
DNW-9WS Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900H HDCAM Camcorder
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder
PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-510P XDCAM Camcorder (DVCAM Recording)

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Specifications

Dimensions:
282(W) x 27(H) x 80(D)mm
(11 1/8 x 1 1/8 x 3 1/4 inches)
Mass:
900 g (2 lb)

VCT-U14 Tripod Adaptor



Applicable Models

DSR-250/1 DVCAM Camcorder
DSR-250P/1 DVCAM Camcorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DXC-D50PH 3-chip CCD Portable Color Camera
DXC-D50PK 3-chip CCD Portable Color Camera
DXC-D50PL 3-chip CCD Portable Color Camera
DXC-D50WSPL 3-chip CCD Portable Color Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera

Specifications

Dimensions:
282 (W) x 27 (H) x 80 (D) mm
(11 1/8 x 1 1/8 x 3 1/4 inches)
Mass:
Approx. 900 g (2 lb)

VFH-550 5-inch Type Viewfinder Sports Hood

5-inch type viewfinder sports hood for BVF-55 series

Applicable Models
BVF-55CE



VFH-770 7-inch Type Viewfinder Sports Hood

7-inch type viewfinder sports hood for BVF-7700/77 series

Applicable Models
BVF-77CE



WLL-CA50 Wireless Camera Transmitter (CER)

Features

*Wireless camera transmitter connected to either a Digital Betacam, Betacam SX, MPEG IMX, or XDCAM camcorder, and used with the WLL-RX55 wireless camera receiver *MPEG-2 video compression and MPEG-1 Layer I/II 48-kHz audio *COFDM for stable transmission *Time interleave *Secure encryption key *2.4 GHz band transmission frequency allows a license-free operation *Cable-free camcorder connection *Flexible channel selector (up to 6 simultaneous channels) *User-friendly menu *Low power consumption



Applicable Models

DNW-7P Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
DVW-707P Digital Betacam Camcorder
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder
MSW-900P MPEG IMX Camcorder
PDW-510P XDCAM Camcorder (DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Supplied Accessories

Transmission antenna (1)

Optional Accessories

BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
AC-550CE AC Adaptor
WLL-RX55

Specifications

General

Power requirement:
12 V DC
Power consumption:
9W
Operating temperature:
0 °C to +40 °C (+32 °F to +104 °F)

Dimension (w x h x d):

97 x 209 x 152 (mm),
3 7/8 x 8 1/4 x 6 (inches)

Mass (excluding antenna):

1.2 kg (2 lb 10 oz)

RF block

TX center frequency range:

2406 to 2478 MHz

Modulation:

16 QAM-COFDM, QPSK-COFDM

Occupied bandwidth:

8 MHz

Channel spacing:

12 MHz

RF power output:

4 mW (EIRP = 10 mW)

Antenna gain:

4.0 dBi

Input

Input signals:

Digital component parallel
40-pin (Sony camcorder)
SDI (embedded audio)
BNC (x1) (spare)

Ext. DC IN:

11.3 to 17 V DC
XLR 4-pin male (x1)

Eco-info

Lead-free solder is used for soldering certain parts.
Halogenated flame retardants are not used in the printed wiring boards.

WLL-CA55 Wireless Camera Transmitter (CER)

Features

*Wireless camera transmitter connected to a BVP-E30 camera, and used with the WLL-RX55 receiver *MPEG-2 broadcast quality video and MPEG-1 Layer I/II 48-kHz audio transmission *Stable transmission using COFDM technology *Time interleave *2.4 GHz band transmission frequency allows a license-free operation *Secure encryption key *Cable-free camera connection *Full camera remote control capability *Full camera genlock *Flexible channel selector (up to 6 simultaneous channels) *User-friendly menu *Transmission status display in viewfinder *Low power consumption



Applicable Models

BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera

Supplied Accessories

Transmission antenna (1)
Operation manual (1)

Optional Accessories

BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
AC-550CE AC Adaptor
WRR-855B UHF Synthesized Diversity Tuner (62CE7)
WRR-855A UHF Synthesized Diversity Tuner (64U)

Specifications

General

Power requirements:
DC 12 V
Power consumption:
15 W
Operating temperature:
-20 °C to +45 °C (-4 °F to +113 °F)
Dimensions (W x H x D):
132 x 214 x 176 mm (5 1/4 x 8 1/2 x 7 inches)
Mass (excluding antenna):
2 kg (4 lb 7 oz)

RF block

Transmission frequency range:
2402 to 2470 MHz (USA and Canada)
2402 to 2482 MHz (Other countries)

Transmission center

frequency range:
2406 to 2466 MHz
(USA and Canada)
2406 to 2478 MHz (Other countries)

Transmission mode:

Standard/Robust/High-picture/Standard-LD
(low delay)/Robust-LD (low delay)

Minimum system delay (Time interleave mode:
off):

2.3 frames (*)

Modulation:

16 QAM-COFDM, QPSK-COFDM

Occupied bandwidth:

8 MHz

Channel spacing:

12 MHz

RF power output:

4 mW (EIRP=10 mW)

Antenna gain:

4.0 dBi

Antenna directivity:

Omni-directional

Input/output

Camera interface:

Digital component parallel 68-pin (for Sony digital camera)

Analog component parallel 68-pin (for Sony analog camera)

DC input:

XLR-4-pin (for the optional AC-550/550CE), DC 10.5 to 17 V

DC output:

4-pin (for wireless microphone receiver), DC 10.5 to 17 V (Max. 200 mA)

RF output:

N-type special connector, 50 Ω

Video input:

BNC (SDI or analog composite), 1.0 Vp-p, 75 Ω

Audio input (CH-1/CH-2):

XLR-3-pin x 2

Intercom:

XLR-5-pin

Earphone:

Mini jack

Remote:

8-pin

Slot for wireless microphone receiver:

D-sub 15-pin

Eco info

Lead-free solder is used for soldering certain parts.

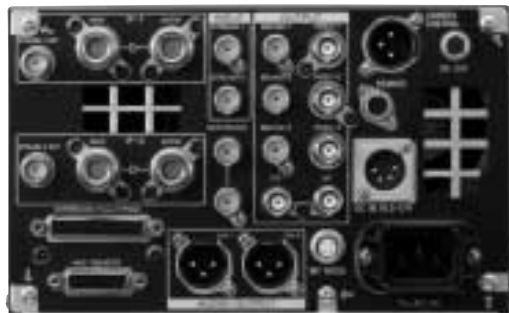
Halogenated flame retardants are not used in the printed wiring boards.

* The system delay is measured by WLL-CA55 and WLL-RX55 combination.

WLL-RX55 Wireless Camera Receiver

Features

*Wireless camera receiver, designed to be used with the WLL-CA50/CA55 *Diversity reception *MPEG-2 video compression and MPEG-1 Layer I/II 48-kHz audio *COFDM for stable transmission*Time interleave *2.4 GHz band transmission frequency allows a license-free operation *Secure encryption key *Flexible channel selector (up to 6 simultaneous channels) *Wireless camera control capability *User-friendly menu *Versatile antenna unit



Supplied Accessories

Reception antenna (2)
Down converter (2)
Mounting bracket (2)
Mounting screw: M3 (4)
Mounting screw: M4 (8)
Coaxial cable with N-type connectors (10 m) (2)
4-pin connector (1)
Fasten belt (1)
Camera number plate (1)
Operation manual (1)

Optional Accessories

RM-B750 Remote Control Unit
RM-B150 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
WRT-8B UHF Synthesized Transmitter (6668U)
WRT-822A UHF Synthesized Wireless Transmitter (64U)
WRT-822B UHF Synthesized Wireless Transmitter (62CE7)

Specifications

General

Power requirements:
AC 100 to 240 V, 50/60 Hz or DC 12 V
Power consumption:
66 W
Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
-20 to +60 °C (-4 to +140 °F)
Dimensions (W x H x D):
200 x 127 x 365 mm (7 7/8 x 5 x 14 3/8 inches)
Mass:
5 kg (11 lb)

Reception system

Receiving center frequency range:
2406 to 2478 MHz
Occupied bandwidth:
8 MHz
Channel spacing:
12 MHz
Antenna gain:
9.0 dBi
Antenna directivity:
60°
Modulation:
16QAM-COFDM, QPSK-COFDM

IF center frequency:
326 to 398 MHz
IF input connector:
N-type special connector x 2, 50 Ω
IF output connector:
N type special connector x 2, 50 Ω, loop through
Input/output
Bitstream input:
Data format
DVB-ASI
Connector
BNC x 2, 75 Ω
Bitstream output:
Data format
DVB-ASI
Connector
BNC x 2, 75 Ω
Sync signal input:
Reference input
BNC x 2, VBS/BS: 1.0 Vp-p, 75 Ω, loop through
Digital signal output:
SDI/ASI output
BNC x 3, transmission cable length: max. 200 m
SDI: 4:2:2 component serial digital (270 Mb/s), 0.8 Vp-p, 75 Ω
ASI: DVB-ASI, EN50083-9 (DVB-PI-232 Revised TM Rev.2)
Transmission mode: Data-packet mode (188 bytes)
Analog signal output:
Video 1
BNC, 1.0 Vp-p, 75 Ω
Video 2
BNC, 1.0 Vp-p, 75 Ω
Video 3
BNC, 1.0 Vp-p, 75 Ω
PIX
BNC, 1.0 Vp-p, 75 Ω
WF
BNC, Encode output: 1.0 Vp-p, 75 Ω
WF mode
4-pin
Audio output
XLR-3-pin x 2, 0 dBu/-20 dBu balanced
Other input/output
DC input:
XLR-4-pin (for the optional AC-550/550CE), DC 10.5 to 17 V
DC output:
4-pin (for wireless microphone transmitter) (Max. 200 mA)

Remote:
8-pin
Intercom/Tally/Program:
D-sub 25-pin, 4W/RTS,
Tally: DC 24 V, TTL level, or contact selectable
Mic remote:
D-sub 15-pin
Intercom (front):
XLR-5-pin
Camera control:
XLR-3-pin
Eco info
Lead-free solder is used for soldering certain parts.
Halogenated flame retardants are not used in the printed wiring boards.

HDCAM Camcorders

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HDW-F900C HDCAM Camcorder

Features

*CineAlta product*Combines an HD color video camera head with an HDCAM portable video cassette recorder

*Incorporates three 2/3-inch type Power HAD FIT CCD imagers each with 2,200,000 pixels that conform to 1920(H) x 1080(V) CIF (Common Image Format) *The high quality of 12-bit A/D converter and Advanced Digital Signal Processor (ADSP) make this camcorder ideal for electronic cinematography purposes *A new method of processing HD digital signals further improves image quality and simplifies setup operations *Superb recording quality and high reliability of the HDCAM format in the VTR section *Allows multi-format recording of 23.976/24/25/29.97/30 progressive and 50/59.94/60 interlaced at 1920 x 1080 pixel resolution *Supports 1080/24PsF format which is defined as ITU-R.BT709-3 HDTV standards for Production and International Program Exchange *Various cinematography accessories can be attached to its compact, lightweight and robust body

*Memory stick setup system can memorize and recall various parameter settings *Electronic shutter includes S-EVS function to provide blur-free images in any situation *A simple switch operation enables automatic adjustment of black set, black balance and white balance

*Various warning indicators *Dual filter wheels for Neutral density and Color temperature control



Supplied Accessories

Microphone, Super cardioid directional,
external power supply type (1)
HDVF-C30W Multi-format HD Color LCD Viewfinder
VCT-14 Tripod Adaptor (1)
Shoulder strap (1)
Rain cover (1)
Operational Manual (1)
Maintenance Manual (1)

Optional Accessories

BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
AC-DN10 AC Adaptor/Charger
AC-DN2B AC Adaptor
BC-M150 Ni-MH & Li-ion Battery Charger
HDVF-C30W Multi-format HD Color LCD Viewfinder
HDVF-20A 2-inch Type HD B/W CRT Viewfinder
HDCA-901 HD-SDI Adaptor
RM-B750 Remote Control Unit
BCT-HD tapes BCT-HD series HDCAM tapes
BKW-401 Viewfinder Rotation Bracket
HDVF-C750W Multi-format HD Color LCD Viewfinder
RM-B150 Remote Control Unit
CCXA Cable Audio Cable

Specifications

General

Mass:

Approx. 7.9 kg (17 lb 10 oz) with lens, cassette and BP-GL95

Power requirements:

DC 12 V (+5.0 V/-1.0 V)

Power consumption:

40 W (With 12 V power supply, rec mode)

Operating temperature:

0 °C to +40 °C (+32 °F to +104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to + 140 °F)

Operating humidity:

25% to 80% (relative humidity)

Continuous operating time:

Approx. 80 min (with BP-L60A)

Inputs/outputs

Genlock video input:

BNC, 1.0 Vp-p, 75 Ω

Time code input:

BNC, 0.5 V to 18 Vp-p, 10 kΩ

Audio CH1/CH2 input:

XLR-3-31 type (female), -60 dBu/+4dBu selectable, high impedance, balanced

MIC input:

XLR-3-31 type (female), -60 dBu

Monitor output:

BNC x 3 (Y, PB, PR or R/G/B), 1.0 Vp-p, 75 Ω, unbalanced

Audio output:

XLR-3-31 type (female), 0 dBm

Time code output:

BNC, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack, 8 Ω, -∞ to -18 dBs variable

DC input:

XLR 4-pin (male), 11 to 17 VDC

DC output:

11 to 17 VDC, Max. 100 mA

Lens:

12-pin

Remote:

8-pin

VTR Section

Recording format:

HDCAM

Tape speed:

Approx. 77.4 mm/s (24P mode)

Playback/Recording time:

Max. 50 min with BCT-40HD cassette (24P mode)

Fast forward time:

Approx. 6 min with BCT-40HD

Rewind time:

Approx. 6 min with BCT-40HD

Recommended tape:

Sony BCT-40HD/22HD

Sampling frequency:

Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:

10 bit/sample (8 bit sample for compression process)

Error correction:

Reed-Solomon code

Error concealment:

Adaptive three dimensional

Digital audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

85 dB min. (emphasis ON)

Distortion:

0.08 % Max.

Cross talk:

-70 dB

Wow and flutter:

Below measurable limit

Camera Section

Pickup device:

3-chip 2/3-inch FIT type CCD

Picture elements:

2,200,000

Optical system:

F1.4 prism

Built-in filters:

A: 5600 K B: 3200 K C: 4300 K D: 6300

K 1: Clear 2: 1/4 ND 3: 1/16 ND 4: 1/64

ND

Shutter speed:

1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

Clear scan:

60.0 to 7000 Hz (S-EVS) 0 to 100%

Lens mount:

Special bayonet mount

Sensitivity:

F10.0 at 2,000 lux, 89.9% reflective

HDW-F900H HDCAM Camcorder

Features

*CineAlta product*Combines an HD color video camera head with an HDCAM portable video cassette recorder
 *Incorporates three 2/3-inch type Power HAD FIT CCD imagers each with 2,200,000 pixels that conform to 1920(H) x 1080(V) CIF (Common Image Format) *The high quality of 12-bit A/D converter and Advanced Digital Signal Processor (ADSP) make this camcorder ideal for electronic cinematography purposes *A new method of processing HD digital signals further improves image quality and simplifies setup operations *Superb recording quality and high reliability of the HDCAM format in the VTR section *Allows multi-format recording of 23.976/24/25/29.97/30 progressive and 50/59.94/60 interlaced at 1920 x 1080 pixel resolution *Supports 1080/24PsF format which is defined as ITU-R.BT709-3 HDTV standards for Production and International Program Exchange *Various cinematography accessories can be attached to its compact, lightweight and robust body
 *Memory stick setup system can memorize and recall various parameter settings *Electronic shutter includes S-EVS function to provide blur-free images in any situation *A simple switch operation enables automatic adjustment of black set, black balance and white balance
 *Various warning indicators *Dual filter wheels for Neutral density and Color temperature control



Supplied Accessories

Microphone, Super cardioid directional,
 external power supply type (1)
 VCT-14 Tripod Adaptor (1)
 Shoulder strap (1)
 Rain cover (1)
 Operational Manual (1)
 Maintenance Manual (1)

Optional Accessories

BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium-ion Battery Pack
 AC-DN10 AC Adaptor/Charger
 AC-DN2B AC Adaptor
 BC-M150 Ni-MH & Li-ion Battery Charger
 HDVF-C30W Multi-format HD Color LCD Viewfinder
 HDVF-20A 2-inch Type HD B/W CRT Viewfinder
 HDCA-901 HD-SDI Adaptor
 RM-B750 Remote Control Unit
 BCT-HD tapes BCT-HD series HDCAM tapes
 BKW-401 Viewfinder Rotation Bracket
 HDVF-C750W Multi-format HD Color LCD Viewfinder
 RM-B150 Remote Control Unit
 CCXA Cable Audio Cable

Specifications

General

Mass:

Approx. 7.9 kg (17 lb 10 oz) with lens, cassette and BP-GL95

Power requirements:

DC 12 V (+5.0 V/-1.0 V)

Power consumption:

40 W (With 12 V power supply, rec mode)

Operating temperature:

0 °C to +40 °C (+32 °F to +104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to + 140 °F)

Operating humidity:

25% to 80% (relative humidity)

Continuous operating time:

Approx. 80 min (with BP-L60A)

Inputs/outputs

Genlock video input:

BNC, 1.0 Vp-p, 75 Ω

Time code input:

BNC, 0.5 V to 18 Vp-p, 10 k Ω

Audio CH1/CH2 input:

XLR-3-31 type (female), -60 dBu/+4dBu selectable, high impedance, balanced

MIC input:

XLR-3-31 type (female), -60 dBu

Monitor output:

BNC x 3 (Y, PB, PR or R/G/B), 1.0 Vp-p, 75 Ω , unbalanced

Audio output:

XLR-3-31 type (female), 0 dBm

Time code output:

BNC, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack, 8 Ω , $-\infty$ to -18 dBs variable

DC input:

XLR 4-pin (male), 11 to 17 VDC

DC output:

11 to 17 VDC, Max. 100 mA

Lens:

12-pin

Remote:

8-pin

VTR Section

Recording format:

HDCAM

Tape speed:

Approx. 77.4 mm/s (24P mode)

Playback/Recording time:

Max. 50 min with BCT-40HD cassette (24P mode)

Fast forward time:

Approx. 6 min with BCT-40HD

Rewind time:

Approx. 6 min with BCT-40HD

Recommended tape:

Sony BCT-40HD/22HD

Sampling frequency:

Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:

10 bit/sample (8 bit sample for compression process)

Error correction:

Reed-Solomon code

Error concealment:

Adaptive three dimensional

Digital audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

85 dB min. (emphasis ON)

Distortion:

0.08 % Max.

Cross talk:

-70 dB

Wow and flutter:

Below measurable limit

Camera Section

Pickup device:

3-chip 2/3-inch FIT type CCD

Picture elements:

2,200,000

Optical system:

F1.4 prism

Built-in filters:

A: 5600 K B: 3200 K C: 4300 K D: 6300 K 1: Clear 2: 1/4 ND 3: 1/16 ND 4: 1/64 ND

Shutter speed:

1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

Clear scan:

60.0 to 7000 Hz (S-EVS) 0 to 100%

Lens mount:

Special bayonet mount

Sensitivity:

F10.0 at 2,000 lux, 89.9% reflective

HDW-750P HDCAM Camcorder

Features

*Combines an HD color video camera head with an HDCAM portable video cassette recorder *Incorporates three 2/3-inch type Power HAD FIT CCD imagers each with 2,200,000 pixels that conform to 1920(H) x 1080(V) CIF (Common Image Format) *10-bit A/D converter and Advanced Digital Signal Processor (ADSP) for excellent picture quality *Superb recording quality and high reliability of the HDCAM format in the VTR section *Allows 25PsF and 50i recording at 1920 x 1080 pixel resolutions *Provides excellent portability and a dust and drip-proof design for use in High Definition ENG, EFP and the other applications *A new method of processing HD digital signals further improves image quality and simplifies setup operations *Existing 2/3-inch type lens can be used *Slot-in mechanism to accommodate an optional Wireless Microphone Receiver *Picture cache function (optional) to avoid missing the start of an important shot *Memory stick setup system can memorize and recall various parameter settings *Electronic shutter includes ECS and S-EVS functions to provide motion blur-free images in any situation *HD SDI output provided as standard *Down converted SD-SDI or analog composite out (option) *Dual filter wheels for Neutral density and Color temperature control *A simple switch operation enables automatic adjustment of black set, black balance and white balance *Various warning indicators



Supplied Accessories

HDVF-20A 2-inch Type HD B/W CRT Viewfinder (1)
 Stereo microphone(super cardioid directional, external power supply type) (1)
 Shoulder Strap (1)
 Lens mount securing rubber (1)
 Operation Manual (1)

Optional Accessories

HDVF-C750W Multi-format HD Color LCD Viewfinder
 HDVF-C30W Multi-format HD Color LCD Viewfinder
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 AC-DN10 AC Adaptor/Charger
 RM-B750 Remote Control Unit
 HKDW-705 Slow Shutter Board
 BC-M150 Ni-MH & Li-ion Battery Charger
 HKDW-702 Down Converter Board
 HKDW-703 Picture Cache Board
 AC-DN2B AC Adaptor
 BKW-401 Viewfinder Rotation Bracket
 RM-B150 Remote Control Unit
 VCT-14 Tripod Adaptor
 HDCA-901 HD-SDI Adaptor
 BVM-D9H5U Color Video Monitor
 WRR-855B/62 UHF Synthesized Diversity Receiver
 WRR-855B/67 UHF Synthesized Diversity Receiver
 WRT-8B/62 UHF Synthesized Diversity Transmitter
 WRT-8B/67 UHF Synthesized Diversity Transmitter
 MSA-A "Memory Stick" IC Memory Media
 VF-508 Monitor ENG Kit
 BKDW-701 Servo Filter Unit
 CCXA Cable Audio Cable

Specifications

General

Power voltage:
12 +5.0/-1.0

Power consumption:
34 W (with 12 V DC supply, when recording without HDVF-20A)

Operating temperature:
0 °C to 40 °C (32 °F to 104 °F)

Operating humidity:
25% to 85% (relative humidity)

Storage temperature:
-20 °C to 60 °C (-4 °F to 140 °F)

Mass:
Approx. 5.3 kg (11 lb 14oz) (with viewfinder, cassette, and BP-GL95 Battery Pack)

Video Camera Section

Imager:
2/3-inch type FIT CCD with 2,200,000 pixels

Effective picture elements:
1920 (H) x 1080 (V)

Imager Configuration:
RGB 3-CCD

Spectral system:
F1.4 prism system (with quartz filter)

Built-in filters
CC filter:
A: Cross filter
B: 3200K
C: 4300K
D: 6300K
ND filter:
1: Clear
2: 1/4 ND
3: 1/16 ND
4: 1/64 ND

Lens mount:
Special bayonet type

Sensitivity:
F10 (Typical) 89.9% reflection chart, 2000 lx

Minimum Illumination:
Approx. 0.3 lx (F 1.4 lens, +42 dB turbo gain)

Smear Level:
-135 dB (typical)

S/N ratio:
54 dB (typical)

Modulation depth at 5 MHz:
45% \pm 5%

Horizontal resolution:
1000 TV lines

Shutter speed:
1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 50i format) 1/33, 1/50, 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 25PsF format)

ECS:
25.0 Hz to 4700 Hz (at 50i format), 25.0 to 2100 Hz (at 25PsF format)

Programmable Gain:
-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB (select in camera set up menu for L/M/H/TURBO)

VTR Section

Usable cassette tapes:
BCT-22HD/40HD 1/2-inch HDCAM cassette tapes

Tape speed:
Approx. 80.6 mm/s (at 50i/25PsF format)

Record/playback time:
Max. 48 min. with BCT-40HD

Fast forward time:
Approx. 5 minutes (using BCT-40HD video cassette)

Rewind time:
Approx. 5 minutes (using BCT-40HD video cassette)

Continuous recording time:
Approx. 90 minutes (using BP-L60A Battery Pack)

Digital video signal

Sampling frequency:
Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:
10 bits/sample (8 bits/sample for compression processing)

Compression:
Coefficient recording system

Channel coding:
S-NRZI PR-IV

Error correction:
Reed-Solomon code

Error concealment:
Adaptive three dimensional

Audio (with standard playback machine)

Frequency response:
20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range:
85 dB min, (emphasis ON)

Distortion:
0.08% max

Cross talk:
-70 dB max

Wow and flutter
Below measurable limit

Input/output connectors

Signal inputs:
Audio IN CH-1/CH-2 (XLR, 3-pin, female):
-60 dBu/+4 dBu (0 dBu = 0.775 Vrms)

MIC IN (XLR, 5-pin, female):
-60 dBu

GENLOCK IN (BNC type):
1.0 Vp-p, 75 Ω

TC IN (BNC type):
0.5 V to 18 Vp-p, 10 k Ω

Signal outputs

TEST OUT (BNC type):
1.0 Vp-p, 75 Ω , unbalanced

VBS/SDI OUT (BNC type) (only when the HKDW-702 is installed):
75 Ω , unbalanced, VBS OUT: 1.0 Vp-p, SDI OUT: 0.8 Vp-p

HD SDI OUT (BNC type):
0.8 Vp-p, 75 Ω , unbalanced

AUDIO OUT (XLR, 5-pin, male):
0 dBm

TC OUT (BNC type):
1.0 Vp-p, 75 Ω

EARPHONE (minijack)
8 Ω , $-\infty$ to -18 dBs variable

Others

DC IN (XLR, 4-pin, male):
11 to 17 V DC

DC OUT (4-pin):
11 to 17 V DC, maximum current 0.1A

LENS (12-pin)

REMOTE (8-pin)

HDW-730S HDCAM Camcorder

The HDW-730S is an HDCAM camcorder that is offered at a price point comparable to high-end SD camcorders by specifically focusing on 1080/60i or 1080/50i acquisition. Equipped with a number of unique features to powerfully assist even the harshest shooting environments, plus the outstanding picture performance that all HDCAM camcorders provide, the HDW-730S is the ideal camcorder to support migration to the next generation of ENG, EFP, and general HD acquisition applications.

Features

*2.2 million-pixel 2/3-inch type IT Power HAD CCD
 *Ultimate Sensitivity (with the HKDW-705 Slow Shutter Board)
 *Reduced risk of missing scenes (with the HKDW-703 Picture Cache Board)
 *Long Recording Time
 *Rugged and Ergonomic Design
 *Versatile Monitoring Capability
 *Shot Mark Handling
 *Quick Setup
 *Single Optical Filter Wheel

Supplied Accessories

HDVF-20A 2-inch Type HD B/W CRT Viewfinder (1)
 Shoulder Strap (1)
 Monaural microphone, Ultra directional (1)
 Lens mount securing rubber (1)
 Operation Manual (1)

Optional Accessories

HDVF-C30W Multi-format HD Color LCD Viewfinder
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 AC-DN10 AC Adaptor/Charger
 RM-B750 Remote Control Unit
 HKDW-705 Slow Shutter Board
 BC-M150 Ni-MH & Li-ion Battery Charger
 HKDW-702 Down Converter Board
 HKDW-703 Picture Cache Board
 AC-DN2B AC Adaptor
 BKW-401 Viewfinder Rotation Bracket
 RM-B150 Remote Control Unit
 VCT-14 Tripod Adaptor
 WRR-855B/62 UHF Synthesized Diversity Receiver
 WRR-855B/67 UHF Synthesized Diversity Receiver
 WRT-8B/62 UHF Synthesized Diversity Transmitter
 WRT-8B/67 UHF Synthesized Diversity Transmitter
 BVM-D9H5U Color Video Monitor
 MSA-A "Memory Stick" IC Memory Media
 VF-508 Monitor ENG Kit
 ECM-MS5 MS Stereo Electret Condenser Microphone
 CCXA Cable Audio Cable



Specifications

General

Mass:

Approx. 3.7 kg (8 lb 3 oz): Main Body,
Approx. 5.3 kg (11 lb 14 oz) (with MIC, VF,
BCT-40HD and BP-GL95)

Dimensions:

127 x 206 x 308 mm (5 x 8 1/8 x 12 1/4
inch)

Power requirements:

DC 12V + 5.0 V/-1.0 V

Power consumption:

33 W (with 12V power supply, REC mode,
without VF)

Operating temperature:

0 °C to +40 °C (32 °F to + 104 °F)

Storage temperature:

-20 °C to + 60 °C (-4 °F to + 140 °F)

Humidity:

25% to 85% (relative humidity)

Continuous operating time:

Approx. 135 min with BP-GL95

Input/Output connectors

Genlock video input:

BNC type x 1, 1.0 Vp-p, 75 Ω

Time code input:

BNC type x 1, 0.5 V to 18 Vp-p, 10 k Ω

Mic input:

XLR-3-pin type x 1 (Female), -60 dBu

Test output:

BNC type x 1, 1.0 Vp-p, 75 Ω , unbalanced

VBS/SDI output (option: HKDW-702):

BNC type x 1, 75 Ω

VBS out: 1.0 Vp-p

SDI out: 0.8 Vp-p

HD-SDI output:

BNC type (x 1), 0.8 Vp-p, 75 Ω ,
unbalanced

Audio output:

XLR-5-pin type x 1 (Male), 0 dBm

Time code output:

BNC type x 1, 1.0 Vp-p, 75 Ω

Earphone:

Mini Jack x 2, 8 Ω , $-\infty$ to -18 dBs variable

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR-4-pin type (Male), DC 11 V to 17 V

DC output

4-pin (for wireless microphone receiver),
DC 11 V to 17 V, maximum current 0.1 A

VTR section

Recording format:

HDCAM

Tape speed:

Approx. 96.7 mm/s (at 30 frames) (at
59.94i format)

Approx. 80.6 mm/s (at 25 frames) (at 50i
format)

Playback/Recording time:

Max. 40 min. with BCT-40HD (at 59.94i
format)

Max. 48 min. with BCT-40HD (at 50i
format)

Fast forward/rewind:

Approx. 5 min. with BCT-40HD

Recommended tape:

Approx. 5 min. with BCT-40HD

Digital video performance

Sampling frequency:

Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:

10 bits/sample (8 bits/sample for
compression processing)

Channel coding:

S-NRZI PR-IV

Compression:

Coefficient recording system

Error correction:

Reed-Solomon code

Error concealment:

Adaptive three dimensional

Audio performance

Frequency response:

20 Hz to 20 kHz, + 0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB (emphasis ON)

Distortion (at 1kHz, emphasis ON, reference level):

Less than 0.08%

Cross talk (at 1 kHz, reference level):

Less than -70 dB

Wow and flutter:

Below measurable limit

Camera section (Performance)

Pickup device:

3-chip 2/3-inch type IT CCD

Effective picture elements:

1920 (H) x 1080 (V)

Optical system:

F1.4 prism (Equipped with Quarz Filter)

Lens mount:

Special bayonet mount

Built-in filters:

1: Clear, 2: 5600K+1/8ND, 3: 5600K,

4: 5600K+1/64ND

Sensitivity (2000 lx, 89.9% reflectance):

F10.0 (typical) Equivalent to ISO 600 or
more

Minimum illumination:

Approx. 0.3 lx (F1.4 lens, +42 dB turbo
gain)

Smear level:

-125 dB

S/N ratio:

54 dB (typical)

Modulation depth at 5 MHz:

45% +/-5%

Horizontal resolution:

1000 TV lines

Shutter speed:

1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000
(s) (at 59.94i format)

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000
(s) (at 50i format)

Clear Scan:

60 Hz to 4300 Hz (at 59.94i format)

Programmable Gain:

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB

Viewfinder

CRT:

2.0-inch monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls

TALLY, ZEBRA, DISPLAY/ASPECT switches

Horizontal resolution:

500 TV lines (16:9, at center)

Microphone:

Ultra-directional monaural microphone
(Detachable)

SONY

XDCAM Camcorders

PDW-510	80
PDW-510P	82
PDW-530	84
PDW-530P	86
CBK-FC01	88
CBK-NC01	88
CBK-SC01	88
CBK-SD01	89

PDW-510 XDCAM Camcorder (DVCAM Recording)

Features

*DVCAM recording *Superb picture and sound quality
 *12-bit A/D conversion *High-performance digital signal processing *2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD *Long recording time of 85 min. *Shock- and dust-resistant disc drive *2.5-inch(*1) type color LCD screen *Thumbnail Search operation *Scene Selection operation *Proxy AV (low-resolution audio and video) Data recording *Metadata recording including Essence Mark, UMID, Extended UMID *Picture cache recording function (up to ten seconds retroactively) *Progressive mode; NTSC: 29.97P or optional 23.976P(*2) *Slow shutter function *Turbo gain function (max. 48 dB) *Auto Tracing White Balance (ATW) capability *Multi-matrix function *Interval recording function *Analog composite output as standard *SDI output and analog composite input as option *Four assignable buttons *Slot to accommodate a Sony WRR-855 Series wireless microphone receiver *Optional Ethernet adaptor *"Memory Stick" stores camera setup parameters *Intelligent light system powered from the camcorder's battery *Built-in optical filter wheels *Camera control from RM-B150/B750 *Compact and lightweight (approx. 5.8 kg including VF, BP-IL75 battery, disc and mic) *Low power consumption of 36 W

(*1) Measured diagonally (*2) Recording to disc is in 59.94i via 2-3 pull-down



Supplied Accessories

Operation manual (1)

Viewfinder (1)

Lens cap (1)

Shoulder belt (1)

Monaural microphone (1)

Optional Accessories

CBK-FC01 Pull-down (24P shooting) Board

CBK-SC01 Analog Composite Input Board

CBK-SD01 SDI Output Board

CBK-NC01 Ethernet (100Base-TX) Adaptor

CA-701 Camcorder Adaptor

CA-702 Camcorder Adaptor

WLL-CA50 Wireless Camera Transmitter (UC)

WLL-RX55 Wireless Camera Receiver

RM-B150 Remote Control Unit

RM-B750 Remote Control Unit

BP-M100 Rechargeable Nickel Metal Hydride

Battery Pack

BP-IL75 Rechargeable Lithium-ion Battery

Pack

BP-GL95 Rechargeable Lithium-ion Battery

Pack

BC-M50 Ni-MH & Li-ion Battery Charger

BC-M150 Ni-MH & Li-ion Battery Charger

AC-550 AC Adaptor

AC-DN2B AC Adaptor

AC-DN10 AC Adaptor/Charger

VCT-14 Tripod Adaptor

BVF-V10 1.5-inch Type B/W Viewfinder (EIA)

BKW-401 Viewfinder Rotation Bracket

PF023 Disc Professional Disc

MSA-A "Memory Stick" IC Memory Media

CCXA Cable Audio Cable

VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL66 cables 6-pin <-> 6-pin i.LINK

Cable

DMX-P01 Portable digital mixer

WRR-855A UHF Synthesized Diversity Tuner (64U)

WRR-855A UHF Synthesized Diversity Tuner (AU)

WRR-855A UHF Synthesized Diversity Tuner (68U)

WRR-855A UHF Synthesized Diversity Tuner (KR)

WRR-855B UHF Synthesized Diversity Tuner (1416U)

WRR-855B UHF Synthesized Diversity Tuner (3032U)

WRR-855B UHF Synthesized Diversity Tuner (6264U)

WRR-855B UHF Synthesized Diversity Tuner (6668U)

WRR-861B UHF Synthesized Diversity Tuner (U6264)

WRR-861B UHF Synthesized Diversity Tuner (U6668)

WRR-862B UHF Synthesized Dual Diversity Tuner (1416U)

WRR-862B UHF Synthesized Dual Diversity Tuner (3032U)

WRR-862B UHF Synthesized Dual Diversity Tuner (6264U)

WRR-862B UHF Synthesized Dual Diversity Tuner (6668U)

Specifications

General

Mass:

Approx. 4.1 kg (9 lb)
5.8 kg (12 lb 12 oz, with VF, Mic, Disc,
BP-IL75 battery)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption:

Approx. 36 W (while recording, with
viewfinder, color LCD off)

Operating temperature:

-5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

-20 to +60 °C (-4 °F to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 120 min. w/BP-GL95 battery,
approx. 90 min. w/BP-IL75 battery

Recording format

Video:

DVCAM (25 Mb/s)

Proxy Video:

MPEG-4

Audio:

4 ch/16 bits/48 kHz

Proxy Audio:

A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

85 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

XLR-3-31 x2, line / mic / mic+48V /
AES/EBU selectable

Mic input:

XLR-3-31 x1

Signal outputs

Video output:

BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x2 (front: monaural, rear:
stereo/monaural)

Audio output (CH-1/CH-2):

XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin (for the optional AC-550)

DC output:

4-pin (for wireless microphone receiver),
DC 12 V (MAX 0.2A)

Camcorder adapter:

40-pin

i.LINK:

IEEE1394, DV IN/OUT or file access mode,
6-pin x1

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Less than -70 dB (at 1 kHz, reference
level)

Wow & flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Camera section

Pickup device:

3-chip 2/3-inch type 16:9 widescreen

Power HAD EX CCD

Total picture elements:

1038(H) x 1008(V)

Effective picture elements:

980 (H) x 494 (V)

Optical system:

F1.4 prism

Built-in optical filters:

1 : 3200K, 2: 5600K+1/8ND, 3: 5600K,
4: 5600K+1/64ND

Shutter speed:

1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000
(s)

Slow shutter:

1/2 to 1/30 (s) (1 to 8 and 16 frame
accumulation)

Lens mount:

2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F11 (typical)

Minimum illumination:

Approx. 0.13 lx (F1.4 lens, +48 dB turbo
gain, shutter off)

Gain selection:

-3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB,
18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

-140 dB (typical)

S/N ratio:

65 dB (typical)

Vertical resolution

400 TV Lines/450 TV Lines(EVS)

Registration:

0.05% (all zones, w/o lens)

Geometric distortion:

Below measurable level (w/o lens)

Modulation depth at 5 MHz:

70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

2.0-inch type monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls,
TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (detachable)

Built-in LCD monitor

LCD:

2.5-inch type color LCD monitor

"Eco Info"

Halogenated flame retardants are not used
in printed wiring boards.

PDW-510P XDCAM Camcorder (DVCAM Recording)

Features

*DVCAM recording *Superb picture and sound quality
 *12-bit A/D conversion *High-performance digital signal processing *2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD *Long recording time of 85 min. *Shock- and dust-resistant disc drive *2.5-inch(*1) type color LCD screen *Thumbnail Search operation *Scene Selection operation *Proxy AV (low-resolution audio and video) Data recording *Metadata recording including Essence Mark, UMID, Extended UMID *Picture cache recording function (up to ten seconds retroactively) *Progressive mode: 25P *Slow shutter function *Turbo gain function (max. 48 dB) *Auto Tracing White Balance (ATW) capability *Multi-matrix function *Interval recording function *Analog composite output as standard *SDI output and analog composite input as option *Four assignable buttons *Slot to accommodate a Sony WRR-855 Series wireless microphone receiver *Optional Ethernet adaptor *Memory Stick™ stores camera setup parameters *Intelligent light system powered from the camcorder's battery *Built-in optical filter wheels *Camera control from RM-B150/B750 *Compact and lightweight (approx. 5.8 kg including VF, battery, disc and mic) *Low power consumption of 36 W

(*1) Measured diagonally (*2) Recording to disc is in 59.94i via 2-3 pull-down



Supplied Accessories

Operation manual (1)

Viewfinder (1)

Lens cap (1)

Shoulder belt (1)

Monaural microphone (1)

Optional Accessories

CBK-SC01 Analog Composite Input Board

CBK-SD01 SDI Output Board

CBK-NC01 Ethernet (100Base-TX) Adaptor

CA-701 Camcorder Adaptor

CA-702P Camcorder Adaptor

WLL-CA50 Wireless Camera Transmitter (CER)

WLL-RX55 Wireless Camera Receiver

RM-B150 Remote Control Unit

RM-B750 Remote Control Unit

BP-M100 Rechargeable Nickel Metal Hydride Battery Pack

BP-IL75 Rechargeable Lithium-ion Battery Pack

BP-GL95 Rechargeable Lithium-ion Battery Pack

BC-M50 Ni-MH & Li-ion Battery Charger

BC-M150 Ni-MH & Li-ion Battery Charger

AC-550CE AC Adaptor

AC-DN2B AC Adaptor

AC-DN10 AC Adaptor/Charger

BVF-V10CE 1.5-inch Type B/W Viewfinder (CCIR)

BKW-401 Viewfinder Rotation Bracket

VCT-14 Tripod Adaptor

PFD23 Disc Professional Disc

MSA-A "Memory Stick" IC Memory Media

CCXA Cable Audio Cable

VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable

DMX-P01 Portable digital mixer

WRR-855A UHF Synthesized Diversity Tuner (AU)

WRR-855B UHF Synthesized Diversity Tuner (21CE7)

WRR-855B UHF Synthesized Diversity Tuner (33CE7)

WRR-855B UHF Synthesized Diversity Tuner (62CE7)

WRR-855B UHF Synthesized Diversity Tuner (67CE7)

WRR-862A UHF Synthesized Dual Diversity Tuner (AU)

WRR-862B UHF Synthesized Dual Diversity Tuner (21CE7)

WRR-862B UHF Synthesized Dual Diversity Tuner (33CE7)

WRR-862B UHF Synthesized Dual Diversity Tuner (62CE7)

WRR-862B UHF Synthesized Dual Diversity Tuner (67CE7)

PDW-RMT500 Camera Control Software

Specifications

General

Mass:

Approx. 4.1 kg (9 lb)
5.8 kg (12 lb 12 oz, with VF, Mic, Disc,
BP-IL75 battery)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption:

Approx. 36 W (while recording, with
viewfinder, color LCD off)

Operating temperature:

-5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

-20 to +60 °C (-4 °F to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 120 min. w/BP-GL95 battery,
approx. 90 min. w/BP-IL75 battery

Recording format

Video:

DVCAM (25 Mb/s)

Proxy Video:

MPEG-4

Audio:

4 ch/16 bits/48 kHz

Proxy Audio:

A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

85 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

XLR-3-31 x2, line / mic / mic+48V /
AES/EBU selectable

Mic input:

XLR-3-31 x1

Signal outputs

Video output:

BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x2 (front: monaural, rear:
stereo/monaural)

Audio output (CH-1/CH-2):

XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin (for the optional AC-550CE)

DC output:

4-pin (for wireless microphone receiver),
DC 12 V (MAX 0.2A)

Camcorder adapter:

40-pin

i.LINK:

IEEE1394, DV IN/OUT or file access mode,
6-pin x1

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Less than -70 dB (at 1 kHz, reference
level)

Wow & flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Camera section

Pickup device:

3-chip 2/3-inch type 16:9 widescreen

Power HAD EX CCD

Total picture elements:

1038(H) x 1188(V)

Effective picture elements:

980(H) x 582(V)

Optical system:

F1.4 prism

Built-in optical filters:

1 : 3200K, 2: 5600K+1/8ND, 3: 5600K,
4: 5600K+1/64ND

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000,
1/2000 (s)

Slow shutter:

1/2 to 1/25 (s) (1 to 8 and 16 frame
accumulation)

Lens mount:

2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F11 (typical)

Minimum illumination:

Approx. 0.13 lx (F1.4 lens, +48 dB turbo
gain, shutter off)

Gain selection:

-3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB,
18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

-140 dB (typical)

S/N ratio:

63 dB (typical)

Vertical resolution

480 TV Lines/530 TV Lines(EVS)

Registration:

0.05% (all zones, w/o lens)

Geometric distortion:

Below measurable level (w/o lens)

Modulation depth at 5 MHz:

70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

2.0-inch type monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls,
TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (detachable)

Built-in LCD monitor

LCD:

2.5-inch type color LCD monitor

"Eco Info"

Halogenated flame retardants are not used
in printed wiring boards.

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Features

*MPEG IMX (50/40/30 Mb/s) and DVCAM switchable recording *Superb picture and sound quality *12-bit A/D conversion *High-performance digital signal processing *2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD *Long recording time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min. *Shock- and dust-resistant disc drive *2.5-inch(*1) type color LCD screen *Thumbnail Search operation *Scene Selection operation *Proxy AV (low-resolution audio and video) Data recording *Metadata recording including essence mark, UMID, Extended UMID *Picture cache recording function (up to ten seconds retroactively) *Progressive mode; NTSC: 29.97P or optional 23.976P(*2) *Slow shutter function *Turbo gain function (max. 48 dB) *Auto Tracing White Balance (ATW) capability *Multi-matrix function *Interval recording function *Analog composite output as standard *SDI output and analog composite input as option *Four assignable buttons *Slot to accommodate a Sony WRR-855 Series wireless microphone receiver *Optional Ethernet adaptor *Memory Stick™ stores camera setup parameters *Intelligent light system powered from the camcorder's battery *Dual optical filter wheels for ND and CC *i.LINK (DV stream) output from MPEG IMX playback *Camera control from RM-B150/B750 *Compact and lightweight (approx. 5.8 kg including VF, BP-IL75 battery, disc and mic) *Low power consumption of 36 W

(*1) Measured diagonally (*2) Recording to disc is in 59.94i via 2-3 pull-down



Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)

Optional Accessories

CBK-FC01 Pull-down (24P shooting) Board
CBK-SC01 Analog Composite Input Board
CBK-SD01 SDI Output Board
CBK-NC01 Ethernet (100Base-TX) Adaptor
CA-701 Camcorder Adaptor
CA-702 Camcorder Adaptor
WLL-RX55 Wireless Camera Receiver
WLL-CA50 Wireless Camera Transmitter (UC)
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-550 AC Adaptor
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
BVF-VC10W 1.35-inch Type Color Viewfinder
BKW-401 Viewfinder Rotation Bracket
VCT-14 Tripod Adaptor
PFD23 Disc Professional Disc
MSA-A "Memory Stick" IC Memory Media
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
CCXA Cable Audio Cable
DMX-P01 Portable digital mixer
WRR-855A UHF Synthesized Diversity Tuner (64U)
WRR-855A UHF Synthesized Diversity Tuner (AU)
WRR-855A UHF Synthesized Diversity Tuner (68U)
WRR-855A UHF Synthesized Diversity Tuner (KR)
WRR-855B UHF Synthesized Diversity Tuner (1416U)
WRR-855B UHF Synthesized Diversity Tuner (3032U)
WRR-855B UHF Synthesized Diversity Tuner (6264U)
WRR-855B UHF Synthesized Diversity Tuner (6668U)
WRR-861B UHF Synthesized Diversity Tuner (U6264)
WRR-861B UHF Synthesized Diversity Tuner (U6668)
WRR-862B UHF Synthesized Dual Diversity Tuner (1416U)
WRR-862B UHF Synthesized Dual Diversity Tuner (3032U)
WRR-862B UHF Synthesized Dual Diversity Tuner (6264U)
WRR-862B UHF Synthesized Dual Diversity Tuner (6668U)

Specifications

General

Mass:

Approx. 4.1 kg (9 lb)
5.8 kg (12 lb 12 oz, with VF, Mic, Disc,
BP-IL75 battery)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption:

Approx. 36 W (while recording, with
viewfinder, color LCD off)

Operating temperature:

-5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

-20 to +60 °C (-4 °F to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 90 min. w/BP-IL75 battery, approx.
120 min. w/BP-GL95 battery

Recording format

Video:

MPEG IMX (50/40/30 Mb/s), DVCAM
(25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 4 ch/16 bits/48 kHz or
4 ch/24 bits/48 kHz
DVCAM: 4 ch/16 bits/48 kHz

Proxy Audio:

A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

MPEG IMX:

50 Mb/s: 45 min., 40 Mb/s: 55 min.,
30 Mb/s: 68 min.

DVCAM:

85 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

XLR-3-31 x2, line / mic / mic+48V /
AES/EBU selectable

Mic input:

XLR-3-31 x1

Signal outputs

Video output:

BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x2 (front: monaural, rear:
stereo/monaural)

Audio output (CH-1/CH-2):

XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin (for the optional AC-550)

DC output:

4-pin (for wireless microphone receiver),
DC 12 V (MAX 0.2A)

Camcorder adapter:

40-pin

I.LINK:

IEEE1394, DV IN/OUT or file access mode,
6-pin x1

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Less than -70 dB (at 1 kHz, reference
level)

Wow & flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Camera section

Pickup device:

3-chip 2/3-inch type 16:9 widescreen

Power HAD EX CCD

Total picture elements:

1038(H) x 1008(V)

Effective picture elements:

980(H) x 494(V)

Optical system:

F1.4 prism

Built-in optical filters:

1 : Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
A: CROSS, B: 3200K, C: 4300K, D: 6300K

Shutter speed:

1/100, 1/125, 1/250, 1/500, 1/1000,
1/2000 (s)

Slow shutter:

1/2 to 1/30 (s) (1 to 8 and 16 frame
accumulation)

Lens mount:

2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F11 (typical)

Minimum illumination:

Approx. 0.13 lx (F1.4 lens, +48 dB turbo
gain, shutter off)

Gain selection:

-3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB,
18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

-140 dB (typical)

S/N ratio:

65 dB (typical)

Vertical resolution

400 TV Lines/450 TV Lines(EVS)

Registration:

0.05% (all zones, w/o lens)

Geometric distortion:

Below measurable level (w/o lens)

Modulation depth at 5 MHz:

70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

2.0-inch type monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls,
TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (detachable)

Built-in LCD monitor

LCD:

2.5-inch type color LCD monitor

"Eco Info"

Halogenated flame retardants are not used
in printed wiring boards.

PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Features

*MPEG IMX (50/40/30 Mb/s) and DVCAM switchable recording *Superb picture and sound quality *12-bit A/D conversion *High-performance digital signal processing *2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD *Long recording time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min. *Shock- and dust-resistant disc drive *2.5-inch(*1) type color LCD screen *Thumbnail Search operation *Scene Selection operation *Proxy AV (low-resolution audio and video) Data recording *Metadata recording including Essence Mark, UMID, Extended UMID *Picture cache recording function (up to ten seconds retroactively) *Progressive mode: 25P *Slow shutter function *Turbo gain function (max. 48 dB) *Auto Tracing White Balance (ATW) capability *Multi-matrix function *Interval recording function *Analog composite output as standard *SDI output and analog composite input as option *Four assignable buttons *Slot to accommodate a Sony WRR-855 Series wireless microphone receiver *Optional Ethernet adaptor *"Memory Stick" stores camera setup parameters *Intelligent light system powered from the camcorder's battery *Dual optical filter wheels for ND and CC *i.LINK (DV stream) output from MPEG IMX playback *Camera control from RM-B150/B750 *Compact and lightweight (approx. 5.8 kg including VF, BP-IL75 battery, disc and mic) *Low power consumption of 36 W

(*1) Measured diagonally (*2) Recording to disc is in 59.94i via 2-3 pull-down



Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)

Optional Accessories

CBK-SC01 Analog Composite Input Board
CBK-SD01 SDI Output Board
CBK-NC01 Ethernet (100Base-TX) Adaptor
CA-701 Camcorder Adaptor
CA-702P Camcorder Adaptor
WLL-CA50 Wireless Camera Transmitter (CER)
WLL-RX55 Wireless Camera Receiver
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-550CE AC Adaptor
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
BVF-V10CE 1.5-inch Type B/W Viewfinder (CCIR)
VCT-14 Tripod Adaptor
BKW-401 Viewfinder Rotation Bracket
PFD23 Disc Professional Disc
MSA-A "Memory Stick" IC Memory Media

CCXA Cable Audio Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
DSR-DU1 Video Disc Unit
CA-DU1 Camera Adaptor
DMX-P01 Portable digital mixer
WRR-855A UHF Synthesized Diversity Tuner (AU)
WRR-855B UHF Synthesized Diversity Tuner (21CE7)
WRR-855B UHF Synthesized Diversity Tuner (33CE7)
WRR-855B UHF Synthesized Diversity Tuner (62CE7)
WRR-855B UHF Synthesized Diversity Tuner (67CE7)
WRR-862A UHF Synthesized Dual Diversity Tuner (AU)
WRR-862B UHF Synthesized Dual Diversity Tuner (21CE7)
WRR-862B UHF Synthesized Dual Diversity Tuner (33CE7)
WRR-862B UHF Synthesized Dual Diversity Tuner (62CE7)
WRR-862B UHF Synthesized Dual Diversity Tuner (67CE7)
PDW-RMT500 Camera Control Software

Specifications

General

Mass:

Approx. 4.1 kg (9 lb)
5.8 kg (12 lb 12 oz, with VF, Mic, Disc,
BP-IL75 battery)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption:

Approx. 36 W (while recording, with
viewfinder, color LCD off)

Operating temperature:

-5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

-20 to +60 °C (-4 °F to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 120 min. w/BP-GL95 battery,
approx. 90 min. w/BP-IL75 battery

Recording format

Video:

MPEG IMX (50/40/30 Mb/s), DVCAM
(25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 4 ch/16 bits/48 kHz or
4 ch/24 bits/48 kHz
DVCAM: 4 ch/16 bits/48 kHz

Proxy Audio:

A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

MPEG IMX:

50 Mb/s: 45 min., 40 Mb/s: 55 min.,
30 Mb/s: 68 min.

DVCAM:

85 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

XLR-3-31 x2, line / mic / mic+48V /
AES/EBU selectable

Mic input:

XLR-3-31 x1

Signal outputs

Video output:

BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x2 (front: monaural, rear:
stereo/monaural)

Audio output (CH-1/CH-2):

XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin (for the optional AC-550CE)

DC output:

4-pin (for wireless microphone receiver),
DC 12 V (MAX 0.2A)

Camcorder adapter:

40-pin

I.LINK:

IEEE1394, DV IN/OUT or file access mode,
6-pin x1

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Less than -70 dB (at 1 kHz, reference
level)

Wow & flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Camera section

Pickup device:

3-chip 2/3-inch type 16:9 widescreen
Power HAD EX CCD

Total picture elements:

1038(H) x 1188(V)

Effective picture elements:

980(H) x 582(V)

Optical system:

F1.4 prism

Built-in optical filters:

1 : Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
A: CROSS, B: 3200K, C: 4300K, D: 6300K

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000,
1/2000 (s)

Slow shutter:

1/2 to 1/25 (s) (1 to 8 and 16 frame
accumulation)

Lens mount:

2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F11 (typical)

Minimum illumination:

Approx. 0.13 lx (F1.4 lens, +48 dB turbo
gain, shutter off)

Gain selection:

-3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB,
18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

-140 dB (typical)

S/N ratio:

63 dB (typical)

Vertical resolution

480 TV Lines/530 TV Lines(EVS)

Registration:

0.05% (all zones, w/o lens)

Geometric distortion:

Below measurable level (w/o lens)

Modulation depth at 5 MHz:

70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

2.0-inch type monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls,
TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (detachable)

Built-in LCD monitor

LCD:

2.5-inch type color LCD monitor

"Eco Info"

Halogenated flame retardants are not used
in printed wiring boards.

CBK-FC01 Pull-down (24P shooting) Board

Features

*Provides progressive modes of 23.976P to offer a film-like effect

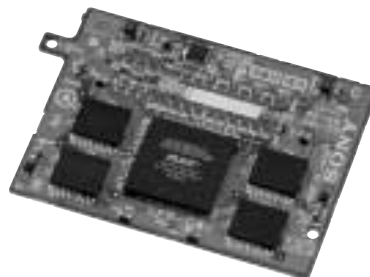
*Recording to disc is in 59.94i via 2-3 pull-down.

Note: Only applicable for NTSC versions, PDW-510P & PDW-530P containing 25P function as standard.

Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)



CBK-NC01 Ethernet (100Base-TX) Adaptor

Features

*Allows PDW-530/530P//510/510P camcorders to connect to an Ethernet network

Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-510P PAL version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

PDW-530P PAL version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)



CBK-SC01 Analog Composite Input Board

Analog composite input board for
PDW-530/530P/510/510P camcorders

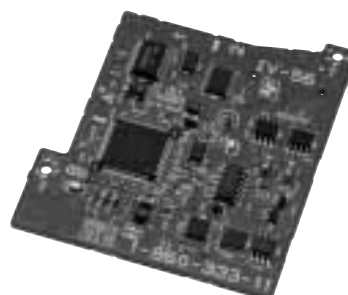
Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-510P PAL version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

PDW-530P PAL version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)



CBK-SD01 SDI Output Board

SDI output board for PDW-530/530P/510/510P camcorder

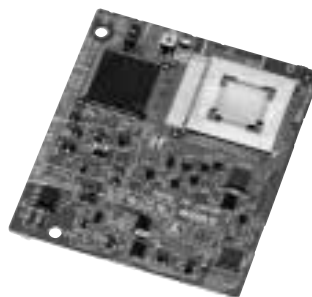
Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-510P PAL version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

PDW-530P PAL version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)



SONY

Digital Betacam Camcorders

DVW-707P	92
DVW-709WSP	94
DVW-790WSP	96

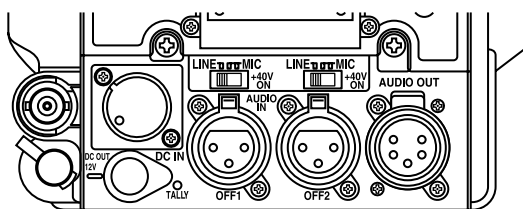
DVW-707P Digital Betacam Camcorder

Features

*Superb picture and sound quality of Digital Betacam format
 *12-bit A/D converter
 *High performance ADSP (Advanced Digital Signal Processing) camcorder
 *Combines digital signal processing camera circuitry with 2/3-inch type Power HAD IT CCDs (each with 470,000 picture elements)
 *40 minutes of recording time on S-cassette
 *Multi Matrix Function for color correction
 *Turbo Gain function
 *Auto Tracing White Balance (ATW) capability
 *TruEye Process for faithful color reproduction
 *Selectable gamma curve for more natural tonal reproduction
 *Color temperature control allows the color balance of a picture to be changed to make it warmer or colder.
 *Assignable button for ATW, RET, REC, Turbo Gain and other functions
 *Internal light system powered from the camcorder's lithium-ion battery
 *Variable speed electronic shutter
 *Clear Scan function for shooting computer displays
 *Enhanced Vertical Definition System (EVS) for vertical resolution of 530 TV lines
 *Shot Data Recording of date and time of shooting, shot ID, cassette number and so on
 *Playback capability of full color video and audio without an adapter
 *Basic camera control from RM-B150 remote control unit
 *Compact and lightweight, approx. 7 kg including viewfinder, battery, cassette, microphone and lens
 *Low power consumption of 29 W



*Lens is optional



Supplied Accessories

Microphone (1)
 Shoulder belt (1)
 Lens cap (1)
 XLR cap (4)
 Maintenance manual (1)
 Operation manual (1)
 BVF-10CE 1.5-inch Type B/W Viewfinder (1)

Optional Accessories

WLL-RX50 Wireless Camera Receiver
 WLL-CA50 Wireless Camera Transmitter (CER)
 BKDW-701 Servo Filter Unit
 LC-777 Carrying Case
 RM-B150 Remote Control Unit
 RM-P9 Remote Control Unit
 CA-755P Camcorder Adaptor
 AC-DN2B AC Adaptor
 AC-DN10 AC Adaptor/Charger
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BC-M150 Ni-MH & Li-ion Battery Charger
 WRR-855B/62 UHF Synthesized Diversity Receiver
 WRR-855B/67 UHF Synthesized Diversity Receiver
 WRT-8B/62 UHF Synthesized Diversity Transmitter
 WRT-8B/67 UHF Synthesized Diversity Transmitter
 ECM-88BC Microphone
 ECM-678 Shotgun Microphone
 CCXA Cable Audio Cable

Optional Boards

BKDW-702 SDI Output Board

For mounting WRR-855A/855B, an adaptor is required.

Digital Betacam Camcorders

Specifications

General

Mass

Approx. 5.0 kg (11 lb. 1 oz)

Operating mass

Approx. 7.0 kg (15 lb. 7 oz)

Power requirements

DC 12 V +5.0/-1.0 V

Power consumption

29 W

Operating temperature

0 °C to +40 °C (+32 °F to +104 °F)

Storage temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Humidity

25 to 85 % (relative humidity)

Continuous operating time

Approx. 165 min (with BP-GL95)

Signal Inputs

Genlock video input

BNC(1), 1.0 Vp-p, 75 Ω

Time code input

BNC(1), 0.5 to 18 Vp-p, 10 kΩ

Audio input (CH-1/2)

XLR 3-pin(2), -60 dBm/+4 dBm selectable, high impedance, balanced

Mic input

XLR 3-pin(2), -60 dBm/+4 dBm selectable, high impedance, balanced

Signal Outputs

Video output

BNC(1), 1.0 Vp-p, 75 Ω

Video test output

BNC(1), 1.0 Vp-p, 75 Ω

Time code output

BNC(1), 1.0 Vp-p, 75 Ω

Earphone

Mini jack

Audio output (CH-1/2)

XLR-5-pin male(stereo)

Others

Lens

12-pin

Remote

8-pin

Light

2-pin, DC 12 V, max. 50 W

DC input

XLR 4-pin

DC output

4-pin (for wireless microphone receiver), DC 12V

Camcorder adapter

40-pin

VTR Section

General

Recording format

Digital BETACAM

Tape speed

96.7mm/s

Playback/Recording time

Max. 40 min. (with BCT-D40 cassette)

Fast forward time

Less than 6 min. (with BCT-D40 cassette)

Rewind time

Less than 5 min. (with BCT-D40 cassette)

Recommended tape

Sony Digital Betacam S cassette, BCT-D6/D12/D22/D32/D40 Series

Sampling Frequency

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization

10 bit/sample

Error correction

Reed-Solomon code

Error concealment

Adaptive three dimensional

Digital video performance

Bandwidth

Y: 5.75 MHz ± 0.5 dB, R-Y/B-Y: 2.75

MHz ± 0.5 dB

S/N ratio

More than 62 dB

K-factor(2T pulse)

Less than 1%

Linearity

Less than 2%

Y/R-Y/B-Y delay

Less than 15 ns

Digital audio performance

Sampling frequency

48 kHz (synchronized with video)

Quantization

20 bits/sample

A/D and D/A quantization

16 bits/sample

Frequency response

20 Hz to 20 kHz +0.5 dB/-0.8 dB

Dynamic range

More than 85 dB(emphasis ON)

Distortion (at 1 kHz, emphasis ON, reference level)

Less than 0.08%

Crosstalk (at 1 kHz, reference level)

Less than -70 dB

Wow and flutter

Below measurable limit

Head room

20 dB (ex-factory setting)

Emphasis (ON/OFF selectable)

T1=50 μ s, T2=15 μ s

Analog audio performance (Cue track)

Frequency response

100 Hz to 12 kHz ± 3 dB

S/N ratio

More than 50 dB at 3% distortion level

Distortion

Less than 1.5%(T.H.D at 1 kHz reference level)

Wow and flutter

Less than 0.2%

Camera Section

Pickup device

3-chip 2/3-Inch Power HAD IT CCD

Picture elements

795(H) x 596(V)

Optical system

F1.4 prism system

Built-in filters

1: CLEAR 2: 5600 K + 1/8 ND 3: 5600 K

4: 5600K + 1/64 ND

Shutter speed

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000(s)

Lens mount

Special bayonet mount

Sensitivity (2000 lx with F8.0, 89.9 % reflective)

F10.0(Typical) Equivalent to ISO 600 or more

Minimum illumination

Approx. 0.15 lx(F1.4 lens, +48 dB Turbo Gain)

Smear level

-125 dB

S/N ratio

63 dB (typical)

Vertical resolution

Without EVS

480 TV lines

With EVS

530 TV lines

Registration

0.05% (All zones, without lens)

Geometric distortion

Below measurable level (Without lens)

Warm-up time

2 s

Modulation depth at 5 MHz

More than 55%

Viewfinder

CRT

1.5-inch type monochrome

Controls

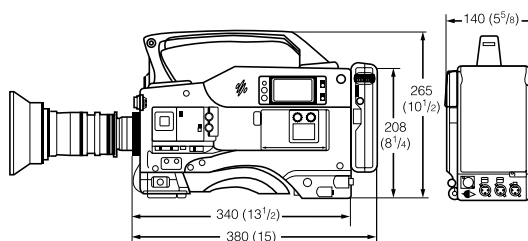
BRIGHT control, CONTRAST control, PEAKING control, TALLY, ZEBRA, DISPLAY switches

Horizontal resolution

600 TV lines

Microphone

Ultra-directional (detachable)



Unit: mm (inch)

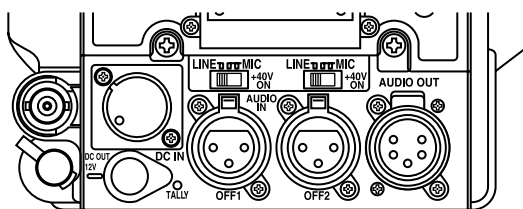
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder

Features

*Superb picture and sound quality of Digital Betacam format *12-bit A/D converter *High performance ADSP (Advanced Digital Signal Processing) camcorder
 *Combines digital signal processing camera circuitry with 2/3-inch type 16:9/4:3 widescreen Power HAD 1000 IT CCD (each with 620,000 picture elements) *40 minutes of recording time on S-cassette *Multi Matrix function for color correction *Turbo Gain function *Auto Tracing White Balance (ATW) capability *TruEye Process for faithful color reproduction *Selectable gamma curve for more natural tonal reproduction *Color temperature control allows the color balance of a picture to be changed to make it warmer or colder *Assignable button for ATW, RET, REC, Turbo Gain and other functions *Internal light system powered from the camcorder's lithium-ion battery
 *Optical filter wheels for ND (Neutral Density) and CC (Color Conversion) *Variable speed electronic shutter *Clear Scan function for shooting computer displays
 *Enhanced Vertical Definition System (EVS) for vertical resolution of 530 TV lines *Shot Data Recording of date and time of shooting, shot ID, cassette number and so on
 *Playback capability of full color video and audio without an adapter *Basic camera control from RM-B150 remote control unit *Compact and lightweight, approx. 7 kg including viewfinder, battery, cassette, microphone and lens *Low power consumption of 31.5 W



*Lens is optional



Supplied Accessories

Microphone (1)
 Shoulder belt (1)
 Lens cap (1)
 XLR cap (4)
 Maintenance manual (1)
 Operation manual (1)
 BVF-20WCE 2-inch B/W Viewfinder

Optional Accessories

WLL-RX50 Wireless Camera Receiver
 WLL-CA50 Wireless Camera Transmitter (CER)
 BVF-V20WCE 2-inch Type B/W Viewfinder (CCIR)
 BKDW-701 Servo Filter Unit
 BKDW-702 SDI Output Board
 CA-755P Camcorder Adaptor
 AC-DN2B AC Adaptor
 AC-DN10 AC Adaptor/Charger
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BC-M150 Ni-MH & Li-ion Battery Charger
 WRR-855B/62 UHF Synthesized Diversity Receiver
 WRR-855B/67 UHF Synthesized Diversity Receiver
 WRT-8B/62 UHF Synthesized Diversity Transmitter
 WRT-8B/67 UHF Synthesized Diversity Transmitter
 CCXA Cable Audio Cable
 RM-B150 Remote Control Unit
 RM-P9 Remote Control Unit
 LC-777 Carrying Case

For mounting WRR-855A/855B, an adaptor is required.

Digital Betacam Camcorders

Specifications

General

Mass:

Approx. 5.0 kg (11 lb 1 oz)

Operating mass:

Approx. 7.0 kg (15 lb 7 oz)

Power requirements:

DC 12 V +5.0/-1.0 V

Power consumption:

31.5 W

Operating temperature:

0 to +40 °C (+32 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

25 to 85% (relative humidity)

Continuous operating time:

Approx. 160 min (with BP-GL95)

Signal inputs

Genlock video input:

BNC(1), 1.0 Vp-p, 75 Ω

Time code input:

BNC(1), 0.5 to 18 Vp-p, 10 kΩ

Audio input (CH-1/2):

XLR 3-pin(2), -60 dBm/+4 dBm selectable, high impedance, balanced

Microphone input:

XLR 3-pin(2), -60 dBm/+4 dBm selectable, high impedance, balanced

Signal outputs

Video output:

BNC(1), 1.0 Vp-p, 75 Ω

Video test output:

BNC(1), 1.0 Vp-p, 75 Ω

Time code output:

BNC(1), 1.0 Vp-p, 75 Ω

Earphone:

Mini jack

Audio output (CH-1/2):

XLR 5-pin male(stereo)

Others

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin

DC output:

4-pin (for wireless microphone receiver), DC 12 V

Camcorder adapter:

40-pin

VTR section

General

Recording format:

Digital BETACAM

Tape speed:

96.7 mm/s

Playback/Recording time:

Max. 40 min (with BCT-D40 cassette)

Fast forward time:

Less than 6 min (with BCT-D40 cassette)

Rewind time:

Less than 5 min (with BCT-D40 cassette)

Recommended tape:

Sony Digital Betacam S cassette, BCT-D6/D12/D22/D32/D40 Series

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Error concealment:

Adaptive three dimensional

Digital video performance

Bandwidth:

Y: 5.75 MHz ± 0.5 dB, R-Y/B-Y: 2.75 MHz ± 0.5 dB

S/N ratio:

More than 62 dB

k-factor (2T pulse):

Less than 1%

Linearity:

Less than 2%

Y/R-Y/B-Y delay:

Less than 15 ns

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

A/D and D/A quantization:

16 bits/sample

Frequency response:

20 Hz to 20 kHz +0.5 dB/-0.8 dB

Dynamic range:

More than 85 dB(emphasis ON)

Distortion (at 1 kHz, emphasis ON, reference level):

Less than 0.08%

Crosstalk (at 1 kHz, reference level):

Less than -70 dB

Wow and flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Emphasis (ON/OFF selectable):

T1=50 μs, T2=15 μs

Analog audio performance (Cue track)

Frequency response:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 50 dB at 3% distortion level

Distortion:

Less than 1.5%(T.H.D at 1 kHz reference level)

Wow and flutter:

Less than 0.2%

Camera section

Pickup device:

3-chip 2/3-inch type widescreen Power HAD 1000 IT CCD

Picture elements:

1038(H) x 594(V)

Optical system:

F1.4 prism system

Built-in filters:

1: CLEAR 2: 1/4 ND 3: 1/16 ND 4: 1/64 ND
A: CROSS B: 3200 K C: 4300 K D: 6300 K

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000(s)

Lens mount:

Special bayonet mount

Sensitivity (2000 lx with F8.0, 89.9% reflective):

F9.0(Typical) Equivalent to ISO 500 or more

Minimum illumination:

Approx. 0.2 lx(F1.4 lens, +48 dB Turbo Gain)

Smear level:

-120 dB

S/N ratio:

63 dB (typical)

Vertical resolution

Without EVS:

480 TV lines

With EVS:

530 TV lines

Registration:

0.05% (all zones, without lens)

Geometric distortion:

Below measurable level (Without lens)

Warm-up time:

2 s

Modulation depth at 5 MHz

16:9 mode:

More than 65%

4:3 mode:

More than 55%

Viewfinder

CRT:

2-inch type monochrome

Controls:

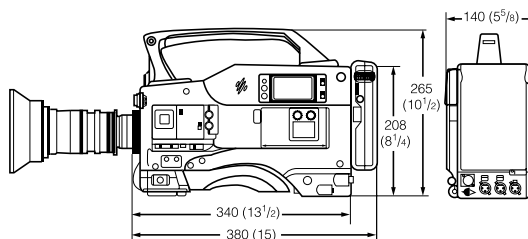
BRIGHT control, CONTRAST control, PEAKING control, TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (detachable)



Unit: mm (inch)

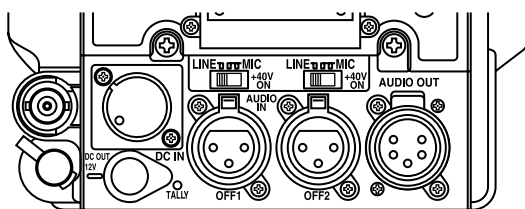
DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder

Features

*Superb picture and sound quality of Digital Betacam format *12-bit A/D converter *High performance ADSP (Advanced Digital Signal Processing) camcorder
 *Combines digital signal processing camera circuitry with 2/3-inch type 16:9/4:3 widescreen Power HAD 1000 FIT CCD (each with 620,000 picture elements) *40 minutes of recording time on S-cassette *Multi Matrix function for color correction *Turbo Gain function *Auto Tracing White Balance (ATW) capability *TruEye Process for faithful color reproduction *Selectable gamma curve for more natural tonal reproduction *Color temperature control allows the color balance of a picture to be changed to make it warmer or colder *Assignable button for ATW, RET, REC, Turbo Gain and other functions. *Internal light system powered from the camcorder's lithium-ion battery
 *Optical filter wheels for ND (Neutral Density) and CC (Color Conversion) *Variable speed electronic shutter *Clear Scan function *Extended Clear Scan function
 *Enhanced Vertical Definition System (EVS) for vertical resolution of 530 TV lines *Shot Data Recording of date and time of shooting, shot ID, cassette number and so on.
 *Playback capability of full color video and audio without an adapter *Basic camera control from RM-B150 remote control unit *Compact and lightweight, approx. 7 kg including viewfinder, battery, cassette, microphone and lens *Low power consumption of 32 W



*Lens is optional



Supplied Accessories

Microphone (1)
 Shoulder belt (1)
 Lens cap (1)
 XLR cap (4)
 Maintenance manual (1)
 Operation manual (1)
 BVF-20WCE 2-inch B/W Viewfinder

Optional Accessories

WLL-RX50 Wireless Camera Receiver
 WLL-CA50 Wireless Camera Transmitter (CER)
 BKDW-701 Servo Filter Unit
 BKDW-702 SDI Output Board
 CA-755P Camcorder Adaptor
 AC-DN2B AC Adaptor
 AC-DN10 AC Adaptor/Charger
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BC-M150 Ni-MH & Li-ion Battery Charger
 WRR-855B/62 UHF Synthesized Diversity Receiver
 WRR-855B/67 UHF Synthesized Diversity Receiver
 WRT-8B/62 UHF Synthesized Diversity Transmitter
 WRT-8B/67 UHF Synthesized Diversity Transmitter
 CCXA Cable Audio Cable
 LC-777 Carrying Case
 RM-B150 Remote Control Unit
 RM-P9 Remote Control Unit

For mounting WRR-855A/855B, an adaptor is required.

Digital Betacam Camcorders

Specifications

General

Mass:

Approx. 5.0 kg (11 lb 1 oz)

Operating mass:

Approx. 7.0 kg (15 lb 7 oz)

Power requirements:

DC 12 V +5.0/-1.0 V

Power consumption:

32 W

Operating temperature:

0 to +40 °C (+32 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

25 to 85 % (relative humidity)

Continuous operating time:

Approx. 190 min (with BP-GL95)

Signal inputs

Genlock video input:

BNC(1), 1.0 Vp-p, 75 Ω

Time code input:

BNC(1), 0.5 to 18 Vp-p, 10 kΩ

Audio input (CH-1/2):

XLR 3-pin(2), -60 dBm/+4 dBm selectable, high impedance, balanced

Microphone input:

XLR 3-pin(2), -60 dBm/+4 dBm selectable, high impedance, balanced

Signal outputs

Video output:

BNC(1), 1.0 Vp-p, 75 Ω

Video test output:

BNC(1), 1.0 Vp-p, 75 Ω

Time code output

BNC(1), 1.0 Vp-p, 75 Ω

Earphone:

Mini jack

Audio output (CH-1/2):

XLR 5-pin male(stereo)

Others

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin

DC output:

4-pin (for wireless microphone receiver), DC 12 V

Camcorder adapter:

40-pin

VTR section

General

Recording format:

Digital BETACAM

Tape speed:

96.7mm/s

Playback/Recording time:

Max. 40 min (with BCT-D40 cassette)

Fast forward time:

Less than 6 min (with BCT-D40 cassette)

Rewind time:

Less than 5 min (with BCT-D40 cassette)

Recommended tape:

Sony Digital Betacam S cassette, BCT-D6/D12/D22/D32/D40 Series

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Error concealment:

Adaptive three dimensional

Digital video performance

Bandwidth:

Y: 5.75 MHz ± 0.5 dB, R-Y/B-Y: 2.75

MHz ± 0.5 dB

S/N ratio:

More than 62 dB

k-factor(2T pulse):

Less than 1%

Linearity:

Less than 2%

Y/R-Y/B-Y delay:

Less than 15 ns

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

A/D and D/A quantization:

16 bits/sample

Frequency response:

20 Hz to 20 kHz +0.5 dB/-0.8 dB

Dynamic range:

More than 85 dB(emphasis ON)

Distortion (at 1 kHz, emphasis ON, reference level):

Less than 0.08%

Crosstalk (at 1 kHz, reference level):

Less than -70 dB

Wow and flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Emphasis (ON/OFF selectable):

T1=50 μs, T2=15 μs

Analog audio performance (cue track)

Frequency response:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 50 dB at 3% distortion level

Distortion:

Less than 1.5%(T.H.D at 1 kHz reference level)

Wow and flutter:

Less than 0.2%

Camera section

Pickup device:

3-chip 2/3-inch widescreen Power HAD

1000 FIT CCD

Picture elements:

1038(H) x 594(V)

Optical system:

F1.4 prism system

Built-in filters:

1: CLEAR 2: 1/4 ND 3: 1/16 ND 4: 1/64 ND

A: CROSS B: 3200 K C: 4300 K D: 6300 K

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000(s)

Lens mount:

Special bayonet mount

Sensitivity (2000 lx with F8.0, 89.9 % reflective):

F9.0(Typical) Equivalent to ISO 500 or more

Minimum illumination:

Approx. 0.2 lx(F1.4 lens, +48 dB Turbo Gain)

Smear level:

-140 dB

S/N ratio:

63 dB (typical)

Vertical resolution

Without EVS:

480 TV lines

With EVS:

530 TV lines

Registration:

0.05% (All zones, without lens)

Geometric distortion:

Below measurable level (Without lens)

Warm-up time:

2 s

Modulation depth at 5 MHz:

16:9 mode:

More than 65%

4:3 mode:

More than 55%

Viewfinder

CRT:

2-inch type monochrome

Controls:

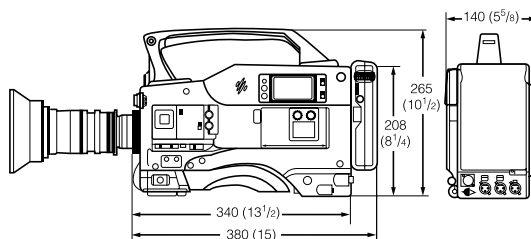
BRIGHT control, CONTRAST control, PEAKING control, TALLY, ZEBRA, DIPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (Detachable)



*Unit: mm (inch)

SONY

MPEG IMX Camcorders

MSW-900P 100

MSW-900P MPEG IMX Camcorder

Features

*Superb picture and sound quality of the MPEG IMX format *12-bit A/D converter *High-performance Digital Signal Processing camcorder *Combines digital signal processing camera circuitry with 2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD (each with one-million picture elements) *71 minutes of recording time on a S-cassette *Analog composite output as standard *SDI output and analog composite input with optional plug-in boards(*1), eliminating the need for an external camera adaptor *Loop recording function allows up to eight seconds of audio and video signals to be buffered in a memory until the Record button is pressed(*2) *Interval recording function to record over a very long time on a single tape(*2) *Multi Matrix Function for color adjustments *Turbo Gain function (max. +48 dB) *Auto Tracing White Balance (ATW) capability *TruEye Process for faithful color reproduction *Color Temperature Control to give a 'warmer' or 'colder' look to the picture *Assignable buttons for ATW, RET, REC and other functions **Memory Stick™ stores camera setup parameters *Intelligent light system powered from the camcorder's battery *Dual optical filter wheels for ND (Neutral Density) and CC (Color Conversion) *Variable speed electronic shutter *Shot mark and shot data recording *Basic camera control from RM-B150 Remote Control Unit *Compact and lightweight, approx. 5.3 kg including viewfinder, battery, cassette, and microphone *Low power consumption of 27 W *Tele-File system

(*1) SDI output: requires MSDW-902 board, analog composite input: MSDW-904 board (*2) Requires optional MSDW-903 plug-in board



Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)
XLR connector cap (4)
BVF-20WCE 2-inch B/W Viewfinder

WRR-855B/62 UHF Synthesized Diversity Receiver
WRR-855B/67 UHF Synthesized Diversity Receiver
WRT-8B/62 UHF Synthesized Diversity Transmitter
WRT-8B/67 UHF Synthesized Diversity Transmitter

Optional Accessories

WLL-RX50 Wireless Camera Receiver
WLL-CA50 Wireless Camera Transmitter (CER)
WLL-CA50 Wireless Camera Transmitter (UC)
MSDW-902 SDI Output Board
MSDW-903 Picture Cache Board
MSDW-904 Analog Composite Input Board
CA-755P Camcorder Adaptor
BVF-55CE 5-inch Type B/W Viewfinder (CCIR)
BKW-401 Viewfinder Rotation Bracket
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
CCU-550AP Portable Camera Control Unit
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M150 Ni-MH & Li-ion Battery Charger
VCT-14 Tripod Adaptor
BCT-MX tapes BCT-MX Series MPEG IMX Tapes
MSA-A *Memory Stick™ IC Memory Media

Specifications

General

Mass:

- Approx. 3.5 kg (7 lb 11 oz)
- Operating mass: 5.3 kg (11 lb 10 oz)

Power requirements:

- DC 12 V +5.0 V/-1.0 V

Power consumption:

- Approx. 27 W

Operating temperature:

- 0 to 40 °C (+32 °F to +104 °F)

Storage temperature:

- 20 to +60 °C (-4 °F to +140 °F)

Humidity:

- 25 to 85% (relative humidity)

Continuous operating time:

- Approx. 190 min w/BP-GL95

Signal inputs

Genlock video:

- BNC type (1), 1.0 Vp-p, 75 Ω

Time code input:

- BNC type (1), 0.5 to 18 Vp-p, 10 kΩ

Audio (CH-1/2):

- XLR-3-31 type (2), -60 dBm/+4 dBm selectable, high impedance, balanced

Mic input:

- XLR-3-31 type (2), -60 dBm/+4 dBm selectable, high impedance, balanced

Signal outputs

Video output:

- BNC type (1), 1.0 Vp-p, 75 Ω

Video test output:

- BNC type (1), 1.0 Vp-p, 75 Ω

Time code output:

- BNC type (1), 1.0 Vp-p, 75 Ω

Earphone:

- Minijack (2)

Audio output (CH-1/CH-2):

- XLR-5-pin male (stereo)

Others

Lens:

- 12-pin

Remote:

- 8-pin

Light:

- 2-pin, DC 12 V, max. 50 W

DC input:

- XLR-4-pin

DC output:

- 4-pin (for wireless microphone receiver), DC 12 V

Camcorder adapter:

- 40-pin

Wireless receiver input:

- D-sub 15-pin

VTR section

Recording format:

- MPEG IMX

Tape speed:

- 53.776 mm/s

Playback/recording time:

- Max. 71 min w/BCT-60MX cassette

Fast forward time:

- Approx. 5 min w/BCT-60MX

Rewind time:

- Approx. 5 min w/BCT-60MX

Recommended tape:

- Sony MPEG IMX S cassette (BCT-6MX/12MX/22MX/32MX/60MX)

Digital video performance

Sampling frequency:

- Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

- 8 bits/sample

Error correction:

- Reed-Solomon code

K-factor (2T pulse):

- Less than 1%

Y/R-Y/B-Y delay:

- Less than 15 ns

Digital audio performance (*)

Sampling frequency:

- 48 kHz (synchronized with video)

Quantization:

- 20/16bits/ sample (selectable)

A/D and D/A quantization:

- A/D:20 bits/sample, D/A:16 bits/sample

Frequency response:

- 20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

- More than 85 dB (emphasis ON)

Distortion (at 1 kHz, emphasis ON, reference level):

- Less than 0.08%

Cross talk (at 1 kHz, reference level):

- Less than -70 dB

Wow and flutter:

- Below measurable limit

Head room:

- 20 dB (ex-factory setting)

Emphasis (ON/OFF selectable):

- T1=50 μs, T2=15 μs

Camera section

Pickup device:

- 3-chip 2/3-inch type 16:9 widescreen Power HAD EX CCD

Total picture elements:

- 1038(H) x 1188(V)

Optical system:

- F1.4 prism

Built-in optical filters:

- 1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND, A: CROSS, B: 3200K, C: 4300K, D: 6300K

Shutter speed:

- 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

Lens mount:

- Special bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

- F11 (typical)

Minimum illumination:

- Approx. 0.15 lx (F1.4 lens, +48 dB turbo gain)

Smear level:

- 140 dB (typical)

S/N ratio:

- 63 dB (typical)

Vertical resolution:

- 480 TV Lines/530 TV Lines(EVS)

Registration:

- 0.05% (all zones, w/o lens)

Geometric distortion:

- Below measurable level (w/o lens)

Warm-up time:

- 2 s

Modulation depth at 5MHz:

- 70%(16:9, typical)/55%(4:3, typical)

Viewfinder

CRT:

- 2.0-inch type monochrome

Controls:

- BRIGHT, CONTRAST, PEAKING controls, TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

- 450 TV lines (16:9)

Microphone:

- Ultra-directional (detachable)

* The specifications given for digital audio performance were measured via CA-701/702 Camcorder Adaptor or MSDW-902 SDI output board.

SONY

HDV Camcorders

HVR-Z1E 104

HVR-Z1E HDV Camcorder

Features

3CCD Camera System with "1080i HD CCD" *14bit HD

DXP *Carl Zeiss® Vario-Sonnar® T* Lens with 12x

Optical Zoom *HD Codec Engine™

*HDV1080i/DVCAM/DV (SP) recording and

playback switchable system *50i/60i (PAL/NTSC)

recording and playback switchable system

*Precision 16:9 SD recording and playback *Down

Conversion function *Built-in wide-range stereo

microphone and 2 ch. XLR Audio Inputs *Versatile

Time Code settings *16:9 colour viewfinder

*16:9 3.5" hybrid colour LCD monitor

*Simultaneous Operation of LCD monitor

and viewfinder *On handle zoom lever

and rec. start/stop button *Variety of zoom

operation *AF (Auto Focus) assist

*Manual Iris *Manual Gain *Manual

Shutter Speed *Assign Buttons (custom

configurable) *Expand focus *Marker

*Colour bars *External REC control *Quick

REC *Audio Settings (recording levels, mic.

Select, monitoring, audio lock, output select, limiter,

noise reduction) *Shot Transition™ *Picture Profile™

*Cinematone Gamma™ and Cineframe™ *Colour

correction functions *Status Check button *Multi-language

operation *Battery status indicator *Customised menu

settings *Long recording time



Supplied Accessories

AC-VQ850 (AC Adaptor/Charger)

Power cord DK-415 (Connecting cord)

NP-F570 (InfoLITHIUM Rechargeable battery pack)

Lens Hood

Large Eye Cup

RMT-841 (Wireless Remote Controller)

A/V Connecting cable

Shoe Adaptor

2x Size AA (R6) batteries

Cleaning Cassette

Shoulder strap

Optional Accessories

NP-F970 InfoLITHIUM rechargeable battery pack

NP-F770 InfoLITHIUM rechargeable battery pack

NP-F570 InfoLITHIUM rechargeable battery pack

2NP-F970/B InfoLITHIUM rechargeable battery pack

VCT-FXA Shoulder Brace

VCL-HG0872 0.8x Wide Conversion Lens

VF-72CPK Filter Kit

LCH-FXA Hard Carrying Case

LCS-VCB Soft Carrying Case

LCR-FXA Rain Jacket

Specifications

Camera section

Lens:

Carl Zeiss Vario-Sonnar T* zoom lens,
12x (optical), f = 4. 5 to 54 mm (3/16 to 2
1/4 inches), f = 32.5 to 390 mm (1 5/16 to
15 3/8 inches)* at 16:9 mode, f = 40 to
480 mm (1 5/8 to 19 inches)* at 4:3 mode,
F = 1.6 to 2.8, filter diameter: 72 mm
(2 7/8 inches)

Built-in filter:

1/6 ND, 1/32 ND

Focus:

Auto, manual (focus ring/infinity position),
one push auto

Imaging device:

3-chip 1/3-inch type CCDs

Picture elements:

Approx. 1,070,000 pixels (effective),
approx. 1,120,000 pixels (total)

White balance:

Auto, one-push auto, indoor (3200 K),
outdoor (5800 K \pm 7 steps)

Shutter speed:

50i/PAL mode 1/3, 1/6, 1/12, 1/25, 1/50,
1/60, 1/100, 1/120, 1/150, 1/215, 1/300,
1/425, 1/600, 1/1000, 1/1250, 1/1750,
1/2500, 1/3500, 1/6000, 1/10000 s
60i/NTSC mode 1/4, 1/8, 1/15, 1/30, 1/60,
1/90, 1/100, 1/125, 1/180, 1/250, 1/350,
1/500, 1/725, 1/1000, 1/1500, 1/2000,
1/3000, 1/4000, 1/6000, 1/10000 s

Exposure:

Auto, manual

Gain:

0, 3, 6, 9, 12, 15, 18 dB (adjustable for H,
M and L gain positions)

Minimum illumination:

3 lx with F1.6 at 18 dB

* These values are calculated to be equivalent to
35mm film

VTR section

Recording format:

1080/50i, 1080/60i, 576/50i (PAL), 480/60i
(NTSC)

Playout/Down-conversion format:

1080/50i, 1080/60i, 576/50i (PAL), 480/60i
(NTSC) 576/50p, 480/60p

Tape speed:

HDV/DV SP Max. 18.812 mm/s with
PHDVM-63DM cassette
DVCAM Max. 28.218 mm/s with PHDVM-
63DM cassette

Playback/Recording time:

HDV/DV SP Max. 63 min with PHDVM-
63DM cassette
DVCAM Max. 41 min with PHDVM-63DM
cassette

Fast forward/Rewind time:

Approx. 2 min 40 s with PHDVM-63DM
cassette

Built-in input/output devices

LCD viewfinder:

0.44-inch type, approx. 252,000 pixels
(1120 x 225), hybrid type LCD monitor
3.5-inch type, approx. 250,000 pixels
(1120 x 224), hybrid type

Microphone:

Stereo type, noise reduction on/off

General

Mass Approx.:

2.1 kg (4 lb 10 oz) (camcorder only)

Power requirements

DC 7.2 V (battery pack)

Power consumption:

HDV Approx. 8.0 W (recording mode
with LCD viewfinder on)
DVCAM/DV Approx. 7.6 W (recording
mode with LCD viewfinder on)

Operating temperature:

0 to 40 °C (32 to 104 °K)

Storage temperature:

-20 to +60 °C (-4 to 140 °K)

Supplied accessories:

AC-VQ850 AC adaptor/charger, power
cord, connecting cord, lens hood, large
eye-cup, RMT-841 wireless Remote
Commander, A/V connecting cable,
component video cable, shoe adaptor,
NP-F570 InfoLITHIUM rechargeable
battery pack, size AA (R6) batteries (2),
cleaning cassette, shoulder strap,
operating instructions

SONY

DVCAM Camcorders

DSR-400PK	108
DSR-400PL	109
DSR-250P/1	110
DSR-PD170P	112
DSR-PDX10P	114

DSR-400PK DVCAM Camcorder

Features

Three 2/3-inch type Power HAD EX CCDs *2.5-inch colour LCD monitor *4:3 aspect ratio *12-bit A/D conversion *Advanced DSP (Digital Signal Processing) *TruEye precessing for faithful colour reproduction *Skin Tone Detail with auto detection of active area *Playback capability of DV recorded tapes (SP mode only) *Long recording time : up to 184 minutes with a standard-size cassette and 40 minutes with a minisize cassette *Interval recording *Scene file store on Memory Stick for quick and convenient set-up *Assignable buttons *i.LINK (DV) output *INFO battery system with BP-GL95/GL65 batteries for precise battery remain indication *Adjustable shoulder pad (The package includes Fujinon 17x zoom lens)



Supplied Accessories

DXF-801 Viewfinder
Microphone
VCT-U14 Tripod Adaptor
Shoulder strap
Lens mount cap
Operating instructions

Optional Accessories

AC-DN10 AC Adaptor
BC-M150 Ni-MH & Li-ion Battery Charger
BC-M50 Ni-MH & Li-ion Battery Charger
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
LC-H300 Hard Carrying Case
LC-DS300SFT Soft Carrying Case

DSR-400PL DVCAM Camcorder

Features

Three 2/3-inch type Power HAD EX CCDs *2.5-inch colour LCD monitor *4:3 aspect ratio *12-bit A/D conversion *Advanced DSP (Digital Signal Processing) *TruEye precessing for faithful colour reproduction *Skin Tone Detail with auto detection of active area *Playback capability of DV recorded tapes (SP mode only) *Long recording time : up to 184 minutes with a standard-size cassette and 40 minutes with a minisize cassette *Interval recording *Scene file store on Memory Stick for quick and convenient set-up *Assignable buttons *i.LINK (DV) output *INFO battery system with BP-GL95/GL65 batteries for precise battery remain indication *Adjustable shoulder pad
*(The package does not include lens)



Supplied Accessories

DXF-801 Viewfinder
Microphone
VCT-U14 Tripod Adaptor
Shoulder strap
Lens mount cap
Operating instructions

Optional Accessories

AC-DN10 AC Adaptor
BC-M150 Ni-MH & Li-ion Battery Charger
BC-M50 Ni-MH & Li-ion Battery Charger
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
LC-H300 Hard Carrying Case
LC-DS300SFT Soft Carrying Case

DSR-250P/1 DVCAM Camcorder

Features

*Compact and lightweight: 4.4 kg (9 lb 11 oz) *Newly developed 1/3-inch type CCDs for accurate color reproduction *Capable of both interlace scan, for moving images, and progressive scan, for still images or shooting a moving subject*¹ and exporting a frame of the image as a still picture *DSP (Digital Signal Processing) *2.5-inch (200,000 dot) color LCD monitor *12x lens*² with Super SteadyShot system *New, high-resolution 1.5-inch black & white viewfinder *16:9 recording mode available (electronically processed) *Recording and playback capability with standard and mini-size DVCAM and DV tapes (SP mode only) *Three XLR audio input connectors for professional microphones (one at front, two at rear) *Audio dubbing capability (48 kHz/16-bit or 32 kHz/12-bit selectable) *Long recording time: 184 minutes with a standard-size cassette in DVCAM mode, or 270 minutes in DV SP mode *Time/date data superimposition on output pictures *Digital still camera functions with Memory Stick *Light output (DC 12 V, max. 30 W) and additional DC 12 V out for optional accessories *Time code preset capability *i.LINK (DV) interface *LANC interface for simple editing with a LANC-equipped recorder or editing system *Supplied RMT-811 Remote Commander

¹ When recording moving images in progressive scan mode, the motion will display some jitter since the picture is read/output every 1/12.5 second. ² Digital zoom of 24x or 48x available via menu selection.

Supplied Accessories

DXF-801 Electronic Viewfinder (1)
ECM-NV1 Monaural Microphone (1)
RMT-811 Remote Commander and R6
Batteries (2)
Lens Hood (1)
Lite Hood Cap (1)

Optional Accessories

CAC-12 Camera Microphone Holder
VCT-U14 Tripod Adaptor
BC-M150 Ni-MH & Li-ion Battery Charger
BC-M50 Ni-MH & Li-ion Battery Charger
BP-L60S Rechargeable Lithium-ion Battery
Pack
AC-DN2B AC Adaptor
VMC-IL46 cables 4-pin <-> 6-pin i.LINK
Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK
Cable
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)
VCL-HG0758 Wide Conversion Lens for the
DSR-250P/1, DSR-170
VCL-HG1758 Tele Conversion Lens
VF-58PK Filter Kit
ECM-670 Electret Condenser Microphone
ECM-670 Electret Condenser Microphone (E)
ECM-672 Electret Condenser Microphone
ECM-672 Electret Condenser Microphone (E)



Specifications

GENERAL

Power requirements:

DC 12 V (11 to 17 V)

Power consumption:

10.5 W using the viewfinder

12.1 W using the viewfinder and LCD monitor

Operating temperature:

0 to 40 °C (32 to 104 °F)

Storage temperature:

-20 to 60 °C (-4 to 140 °F)

Dimensions (W x H x D):

241.7 x 251.2 x 508.8 mm (9 5/8 x 10 x

20 1/8 inches) including microphone

Mass (camcorder only):

Approx. 4.4 kg (9 lb 11 oz)

CAMERA PARTS

Lens:

12:1 Variable Speed (1.2-22 s) zoom lens

F =6.0 to 72.0 mm; F1.6 to 2.4; Filter

Diameter 58mm

Focus:

Auto/Manual (ring)/Infinity/One push auto

Imaging device:

Three 1/3-inch type CCDs, 450,000 pixels,

Progressive/Interlace Scan

White balance:

Auto/One-push(Memory A/Memory

B)/Outdoor (5800 K)/Indoor (3200 K)

Shutter speed:

1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100,

1/120, 1/150,

1/215, 1/300, 1/425, 1/600, 1/1000, 1/1250,

1/1750,

1/2500, 1/3500, 1/6000, 1/10000 second

Exposure:

Auto/Manual

Minimum illumination:

2 lx

Horizontal resolution:

530 TV lines

Viewfinder:

1.5-inch type Black & White CRT, Zebra

Pattern (DXF-801)

VTR PARTS

Audio signal

Rec: 48 kHz/16-bit, 32 kHz/12-bit

Playback: 48 kHz/16-bit, 32 kHz/12-bit,

32 kHz/16-bit, 44.1 kHz/16-bit

Built-in speaker:

Dynamic Speaker

LCD:

TFT Active Matrix, 2.5-inch, 200,640 dots

(880 x 228)

Tape speed:

Approx. 28.2 mm/s (DVCAM mode)

Approx. 18.8 mm/s (DV SP mode)

Maximum recording time:

184 minutes (DVCAM mode), 270 minutes

(DV SP mode) with PDV-184ME cassette

40 minutes (DVCAM mode), 60 minutes

(DV SP mode) with PDVM-40ME cassette

Video signal:

CCIR Standard, PAL color system

Connectors

Video IN/OUT:

RCA pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, sync negative

Monitor OUT:

BNC pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, sync negative

Audio IN/OUT

RCA pin: (2)

245 mV, Output impedance with less than

2.2 k, Input impedance with more than

47 k

S-Video IN/OUT:

Mini-DIN 4 pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, Chrominance signal: 0.3 Vp-p

(PAL)

Audio IN:

XLR 3-pin (female) x 3, -60 dBu - 6.8 k,

+4 dBu - 6.8 k (0 dBu = 0.775 V rms)

DV IN/OUT:

6-pin (with lock): (1)

LANC:

Stereo minimini jack (2.5 mm) : (1)

Headphone:

Stereo mini jack (3.5 mm): (1)

External DC IN:

12 V, XLR 4-pin (male): (1)

DC OUT for Light:

12 V, max. 30 W: (1)

DC OUT:

12 V, 4 pin: (1)

DSR-PD170P DVCAM Camcorder

The DSR-PD170P is a 1/3-inch type 3CCD Digital Camcorder that uses the DVCAM format. Like its predecessor, the market acclaimed DSR-PD150P, the DSR-PD170P addresses a broad spectrum of applications from video journalism, wedding and event videography, corporate and training productions, up to broadcast newsgathering, areas where picture quality, reliability, and mobility are prime concerns. In addition to inheriting all the attractive features of the DSR-PD150P, the DSR-PD170P offers a range of enhancements for further improved audio and video quality and operability, and adds new accessories to meet even more diverse shooting scenarios. The DSR-PD170P is designed to become a handy tool for professional shooting in a wide range of applications.



Features

*Three 1/3-inch type CCDs Camera System *Advanced HAD Technology *Low Light Shooting *Optical 12x Zoom Lens *Optical Super SteadyShot System *Large 180,000-dot LCD Precision Black & White Viewfinder *DVCAM Recording *16:9 Widescreen Acquisition Mode *DVCAM/DV Selectable Recording *2 Ch. XLR Audio Input and Supplied Directional Microphone *16-bit/12-bit PCM Digital Sound and Audio Dub Capability *Newly Developed Hybrid LCD Monitor with a High Resolution of more than 210,000 Pixels *Simultaneous Operation of LCD Monitor and Viewfinder *Large-sized Handle *On-handle Zoom Lever and Rec. Start/Stop Button *Supplied Lens Hood with Built-in Lens Cap *Supplied Wide Conversion Lens and Additional Lens Hood

Supplied Accessories

AC-L15 AC Adaptor (1)
ECM-NV1 Electret Condenser Microphone (1)
NP-F330 Info LITHIUM Rechargeable Battery Pack (1)
VCL-HG0758 Wide Conversion Lens (1)
LSF-S58 Lens Hood for Wide Conversion Lens and Hood Cap (1)
Lens Hood with Built-in Lens Cap (1)
RMT-811 Remote Commander and R6 Batteries (2)
Carrying Belt (1)
i.LINK Cable Strap (1)
Stereo AV Cable (1)

PDV-ME Digital Videocassette Tapes
MSA-A "Memory Stick" IC Memory Media
UWP-C1 UHF Synthesized Wireless Microphone Package (CN)
UWP-C1 UHF Synthesized Wireless Microphone Package (62CE7)
UWP-C1 UHF Synthesized Wireless Microphone Package (AU)
UWP-C1 UHF Synthesized Wireless Microphone Package (67CE7)
ECM-670 Electret Condenser Microphone (U)
ECM-672 Electret Condenser Microphone (U)
DSR-DU1 Video Disc Unit

Optional Accessories

NP-F550 InfoLITHIUM Rechargeable Battery Pack
NP-F750 InfoLITHIUM Rechargeable Battery Pack
NP-F960 InfoLITHIUM Rechargeable Battery Pack
BC-V500 Battery Charger
VCL-HG1758 Tele Conversion Lens
VF-58PK Filter Kit
VCT-1170RM Video Tripod with Remote Control
VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

Specifications

GENERAL

Power Requirements:

DC 7.2 V (Battery), DC 8.4 V (AC adaptor)

Power Consumption:

Rec. with LCD viewfinder only:

4.7 W

Rec. with LCD monitor only:

5.4 W

Rec. with LCD viewfinder and LCD monitor:

5.7 W

Playback on LCD:

4.1 W

Operating Temperature:

0 to 40 °C (32 to 104 °F)

Storage Temperature:

-20 to 60 °C (-4 to 140 °F)

Dimensions (W x H x D):

118 x 180 x 393 mm (4 3/4 x 7 1/8 x 15 1/2 inches) (camcorder only)

133 x 180 x 456 mm (5 1/4 x 7 1/8 x 18 inches) including microphone

Mass (camcorder only):

Approx. 1.6 kg (3 lb 6 oz)

CAMERA PARTS

Lens:

12:1 Variable Speed (1.2-22 sec.) zoom

lens (48x digital zoom)

F =6.0 to 72.0 mm; F1.6 to 2.4; Filter

Diameter 58 mm

Focus:

Auto/Manual (ring)/Infinity/One push auto

Imaging Device:

Three 1/3-inch type CCDs

Gross 450,000 pixels/effective 400,000 pixels

Progressive/Interlace Scan

White Balance:

Auto/One-push/Outdoor (5800 K)/Indoor (3200 K)

Shutter Speed:

1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100,

1/120, 1/150, 1/215

1/300, 1/425, 1/600, 1/1000, 1/1250,

1/1750, 1/2500,

1/3500, 1/6000, 1/10000 second

Exposure:

Auto/Manual

Minimum Illumination:

1 lx with F1.6 at 18 dB gain

Horizontal Resolution:

530 TV lines

Viewfinder:

180,000 dot Black & White LCD

Horizontal Resolution:

500 TV lines

VTR PARTS

Audio Signal

Rec: 48 kHz/16-bit, 32 kHz/12-bit

Playback: 48 kHz/16-bit, 32 kHz/12-bit,

32 kHz/16-bit, 44.1 kHz/16-bit

Built-in Speaker:

Dynamic Speaker, ϕ 20 mm

LCD:

Hybrid, 2.5-inch type, 211,200 dots (960 x 220)

Tape Speed:

Approx. 28.2 mm/s (DVCAM mode)

Approx. 18.8 mm/s (DV SP mode)

Maximum Recording Time:

40 minutes (DVCAM mode)

60 minutes (DV SP mode, with

PDVM-40ME)

Video Signal:

CCIR Standard, PAL color system

Connectors

Video IN/OUT

RCA pin: (1)

Luminance signal: 1 Vp-p, 75 Ω , unbalanced, sync negative

Audio IN/OUT

RCA pin: (2), 327 mV

Output impedance with less than 2.2 k Ω

Input impedance with more than 47 k Ω

S-Video IN/OUT

Mini-DIN 4 pin : (1)

Luminance signal: 1 Vp-p, 75 Ω , unbalanced

Chrominance signal: 0.3 Vp-p

Audio IN

XLR 3-pin female: (2), -60 dBu, 3 k Ω ,

+4 dBu, 10 k Ω (0 dBu = 0.775 V rms)

Digital input/output

i.LINK (DV): 4-pin (1)

Others

LANC: Stereo mini jack (2.5 mm): (1)

Headphone: Stereo mini jack (3.5 mm): (1)

External DC IN: (1) 8.4 V for AC-L15 AC adaptor

DSR-PDX10P DVCAM Camcorder

Features

*Compact and lightweight: 1,050 g (2 lb 5 oz) with a battery and tape. *Newly developed Mega Pixel 1/4.7-inch type 3-CCD camera system *Switchable 4:3 and 16:9 image acquisition and recording modes *Precision 16:9 technology and wider angel of view in 16:9 mode *14-bit DXP (Digital Extended Processor) *Optical Super SteadyShot function *Custom presets *12x optical zoom/ 24x/ 48x precision digital zoom *Manual adjustment: exposure, shutter speed, white balance *Program AE: soft portrait, sports lesson, beach and ski, sunset and moon, landscape *Fader *Zebra patterns (100% or 70%) *Guide frame *Index marking *Date stamping (on to camera recording picture) *Recording/playback of the DVCAM/DV (SP mode) format (*1)*Various interfaces: i.LINK interface, analog audio and video in/out (AV-mini, S-video), USB (Mini-B), headphone (stereo-mini), remote (LANC) *XLR 2-ch audio adaptor for professional microphones *USB streaming function *180,000-dot precision black and-white LCD monitor *3.5-inch(*2) type 246,400-dot precision color LCD monitor *Touch panel operation for adjusting frequently used camera functions *InfoLITHIUM 'M series' battery system *Still-Picture Recording (Progressive Shutter System) *MPEG Movie Recording. Direct or from the DV/DVCAM tape. *Digital program editing (*3) allow auto assembly-like editing without an edit controller *TC/User bit preset capability *Audio dubbing (only for DVCAM recorded tape) *Color Bar (BARS) *Hour meter

(*1) The transition from cut to cut may not be smooth when recorded in DV (SP) format. In between scenes where the recording format is changed from DV to DVCAM, or vice versa, transition may not be smooth. This is a normal and expected phenomenon. Audio dubbing is not possible when recorded in DV (SP) format. (*2) Viewable area measured diagonally. (*3) Frame accuracy is not guaranteed.

Supplied Accessories

XLR adaptor (with a microphone holder) (1)
 USB cable (1)
 Image mixer for SONY/USB driver software
 CD-RM (1)
 ECM-NV1 (Monaural microphone) (1)
 AC-L10 (AC adaptor) (1)
 NP-FM50 (InfoLITHIUM rechargeable battery pack) (1)
 RMT-811 (Remote commander and R6 batteries (x2) (1)
 MSA-8A (IC recording media *Memory Stick) (1)
 Stereo AV cable (1)
 Lens hood (1)
 Wide lens hood (1)
 Hood cap (1)
 Carrying belt (1)

Optional Accessories

ECM-670 Electret Condenser Microphone (E)
 ECM-672 Electret Condenser Microphone (E)
 SPK-DVF4 Sports Pack
 CAC-12 Camera Microphone Holder
 EC-0.3C2 Microphone cable
 MSA-A *Memory Stick* IC Memory Media
 VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable

VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
 VCL-HG0737X Wide Conversion Lens
 VF-R37K ND Filter Kit
 HVL-FH1100 Flash
 LCH-TRV950 Hard Carrying Case
 AC-SQ950D AC Adaptor/Charger



Specifications

GENERAL

Power requirements:

DC 7.2 V (Battery), DC 8.4 V (AC Adaptor)

Power consumption:

5.0 W using the viewfinder /6.3 W using the LCD

Operating temperature:

0 °C to 40 °C (32 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Dimensions (w x h x d):

93 x 99 x 202 mm
(3 3/4 x 4 x 8 inches)

Mass:

950 g (2 lb 1 oz) (camcorder only)

LENS PART

Zoom:

12:1 variable speed zoom lens, f 3.6 to 43.2 mm, F 1.6 to 2.8

Video (4:3): f 49 to 588 mm(*)/(16:9): f 45 to 540 mm(*), Still: f 41 to 492 mm(*)

Filter diameter:

37 mm

Focus:

Auto/Manual (ring)/Infinity/One push auto

CAMERA PART

Imaging device:

Three 1/4.7-inch type CCDs, 1,070,000 pixels (gross)

Signal system:

CCIR Standard, PAL color system

Horizontal resolution:

530 TV lines

Shutter speed:

1/3 to 1/10,000 (s)

White balance:

ATW/One-push/Outdoor (5,800 K)/Indoor (3,200 K)

Exposure:

Auto/Manual

Minimum illumination:

7 lx

Viewfinder:

180,000-dot black and white LCD, Zebra pattern

Built-in microphone:

Stereo electret condenser microphone

Built-in speaker:

Dynamic speaker

LCD:

TFT active matrix, 3.5-inch type
246,400 dots (1,120 x 220)

VTR PART

Tape speed:

Approx. 28.2 mm/s (DVCAM mode),
Approx. 18.8 mm/s (DV SP mode)

Maximum recording time:

40 minutes (DVCAM mode, with PDVM-40ME)
60 minutes (DV SP mode, with PDVM-40ME)

Video signal:

CCIR Standard, PAL color system

Audio signal:

REC: 48 kHz/16-bit, 32 kHz/12-bit
PB: 48 kHz/16-bit, 32 kHz/12-bit, 32 kHz/16-bit
44.1 kHz/16-bit

INPUT/OUTPUT connectors

Audio/Video input/output:

AV mini jack (1)

Video input/output:

S-Video IN/OUT: Mini-DIN 4-pin (1)

Mic input:

Stereo mini jack (1)

Digital input/output:

i.LINK(DV), IEEE1394, 4-pin (1)

XLR Audio input:

XLR 3-pin female (2) via adaptor

LANC:

Stereo mini-mini jack (1)

Headphone:

Stereo mini jack (1)

External DC input:

8.4V from AC-L10 AC adaptor

Memory Card Slot

Memory Stick

Recording signals:

Camera signal, VTR signal

Image compression:

JPEG, MPEG

Image size:

JPEG (640 x 480, 1152 x 864)
MPEG (160 x 112, 320 x 240)

(*) 35 mm equivalent

SONY

Camcorder Accessories/Peripherals

AC-DN10	118
AC-DN2B	119
AC-SQ950D	120
AC-V700A	120
BC-M150	121
BKDW-702	122
BP-GL65	123
BP-GL95	124
BP-L60S	125
HDCA-901	126
HKDW-702	126
HKDW-703	127
HKDW-705	127
HVL-20DW2	127
HVL-F10	127
HVL-FH1100	128
LCH-FXA	128
LCH-TRV950	128
LCH-VX2000A	128
LCR-FXA	128
LCR-VX2000A	129
LCS-VCB	129
MSDW-902	129
MSDW-903	129
MSDW-904	129
NP-F570	130
NP-F770	130
NP-QM91	130
NP-QM91D	130
RM-B150	131
RM-B750	132
VCL-HG0737X	133
VCL-HG0872	133
VCT-1170RM	133
VCT-FXA	133
VF-72CPK	134
VF-R37K	134

AC-DN10 AC Adaptor/Charger

Features

*Compact and lightweight AC adaptor/charger *Maximum 100 W DC power supply *V-mount mechanism for direct attachment to compatible camcorders *XLR-4-pin output to power other equipment *Charging capability of Sony V-mount lithium-ion batteries (BP-GL95/GL65/IL75/L40A/L60A/L90A) *Quick charging - A BP-GL95 can be fully charged within 145 minutes *Can charge batteries while supplying AC power to other equipment



Applicable Models

DNW-7 Betacam SX Camcorder
 DNW-7P Betacam SX Camcorder
 DNW-90WS Betacam SX Camcorder
 DNW-9WS Betacam SX Camcorder
 DNW-9WSP Betacam SX Camcorder
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DVW-707P Digital Betacam Camcorder
 DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
 DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
 DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
 DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder
 HDW-730 HDCAM Camcorder
 HDW-730S HDCAM Camcorder
 HDW-750 HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900H HDCAM Camcorder
 MSW-900 MPEG IMX Camcorder
 MSW-900P MPEG IMX Camcorder
 PDW-510 XDCAM Camcorder (DVCAM Recording)
 PDW-510P XDCAM Camcorder (DVCAM Recording)
 PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
 PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)
 WLL-CA50 Wireless Camera Transmitter (UC)
 WLL-CA50 Wireless Camera Transmitter (CER)
 WLL-CA55 Wireless Camera Transmitter (UC)
 WLL-CA55 Wireless Camera Transmitter (CER)

Supplied Accessories

Operation manual (1)
 AC power cord (1)

Specifications

Power requirements:
 AC 100 V to 240 V
 DC output:
 16.7 V, 6 A
 Operating temperature:
 0 to 40 °C (32 to 104 °F)
 Mass:
 800 g (1 lb 12 oz)
 Dimensions (W x H x D):
 101 x 160 x 37 mm
 (4 x 6 3/8 x 1 1/2 inches)
 Charging time
 BP-GL95:
 145 minutes
 BP-GL65:
 155 minutes
 BP-IL75:
 140 minutes
 Eco-info:
 Lead-free solder is used for soldering.
 Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

AC-DN2B AC Adaptor

Features

*Compact and lightweight AC adaptor/charger *Maximum 150 W DC power supply *V-mount mechanism for direct attachment to compatible camcorders *XLR-4-pin output to power other equipment *Up to 85% charging capability of Sony V-mount lithium-ion batteries (BP-GL95/GL65/IL75/L40A/L60A/L90A)



Applicable Models

DNW-7 Betacam SX Camcorder
 DNW-7P Betacam SX Camcorder
 DNW-90WS Betacam SX Camcorder
 DNW-9WS Betacam SX Camcorder
 DNW-9WSP Betacam SX Camcorder
 DNW-A25WS Betacam SX Portable Recorder
 DNW-A25WSP Betacam SX Portable Recorder
 DSR-250/1 DVCAM Camcorder
 DSR-250P/1 DVCAM Camcorder
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DVW-707P Digital Betacam Camcorder
 DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
 DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
 DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
 DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder
 HDW-730 HDCAM Camcorder
 HDW-730S HDCAM Camcorder
 HDW-750 HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900H HDCAM Camcorder
 MSW-900 MPEG IMX Camcorder
 MSW-900P MPEG IMX Camcorder
 PDW-510 XDCAM Camcorder (DVCAM Recording)
 PDW-510P XDCAM Camcorder (DVCAM Recording)
 PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
 PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)
 SRPC-1 HD Video Processor
 SRW-1 HDCAM-SR Portable VTR
 WLL-CA50 Wireless Camera Transmitter (UC)
 WLL-CA50 Wireless Camera Transmitter (CER)
 WLL-CA55 Wireless Camera Transmitter (UC)
 WLL-CA55 Wireless Camera Transmitter (CER)

Supplied Accessories

DC power cord (1)
 Operation manual (1)

Optional Accessories

CCDD-X2 4-pin/4-pin DC Power Cord for Portable Video Equipment
 BKW-L601 Battery Adaptor

Specifications

Power requirements:
 AC 100 to 240 V
 Rated power output (DC):
 150 W
 Voltage output (DC):
 16.7 V
 Current output (DC):
 9 A (on regulation)
 Mass:
 950 g (2 lb 2 oz)
 Dimensions:
 101(W) x 169(H) x 70(D)mm
 (4 x 6 3/4 x 2 7/8 inches)
 Charging time:
 BP-L60A:
 4 h (to about 85% capacity)
 BP-L90A:
 6 h (to about 85% capacity)

AC-SQ950D AC Adaptor/Charger

Features

*Can be used as a DC adaptor for the
DSR-PDX10/PDX10P *Battery charger for InfoLITHIUM
M series battery. (NP-QM91D)

Applicable Models

DSR-PDX10 DVCAM Camcorder
DSR-PDX10P DVCAM Camcorder

Supplied Accessories

Operation manual (1)
AC power cord (1)
Car battery cord (DCC-VQ1) (1)
Connecting cord (DK-215) (1)

Specifications

Dimensions:

W 123 x H 48 x D 135 mm (4 7/8 x 1 15/16
x 5 3/8 inches)

Mass:

390 g (13.8 oz)

AC power requirement:

AC 100 V to 240 V, 50 Hz/60 Hz

DC power requirement:

12/24 V

Power consumption:

35 W

Operating Temperature:

0°C to 40°C (32°F to 104°F)

Storage Temperature:

-20°C to 60°C (-4°F to +140°F)



AC-V700A AC Adaptor/Charger

Applicable Models

DSR-PD170P
DSR-DU1
HVR-Z1E
HVR-M10E



BC-M150 Ni-MH & Li-ion Battery Charger

Features

*Battery charger for BP-L/IL/GL Series lithium-ion battery packs and BP-M100/M50 nickel metal hydride battery packs *Up to four battery packs can be charged simultaneously *LED indicators to indicate charging status, and discharge ('refresh') status of a nickel metal hydride battery *LCD screen to indicate information of connected batteries such as battery reserve, charge time for full charge, charge/discharge cycles (*1) *DC power output to an external device via the XLR 4-pin connector

(*1) The BC-M150 indicates the battery reserve only when charging the BP-IL75/GL65/GL95/M50/M100 batteries.

Supplied Accessories

AC power cord (1)

Plug holder (1)

Optional Accessories

CCDD-X2 4-pin/4-pin DC Power Cord for

Portable Video Equipment

BP-GL65 Rechargeable Lithium-ion Battery Pack

BP-GL95 Rechargeable Lithium-ion Battery Pack

Specifications

Power requirements:

AC 120 to 240 V, 50/60 Hz

Power consumption:

Approx. 160 W

Output:

DC 16.8 V, 6 A (to the lithium-ion battery pack
or an external device via the XLR 4-pin)

DC 19.5 V, 5 A (to the nickel metal hydride
battery pack)

Charging time:

For one battery

BP-L40A: 125 min

BP-L60A: 140 min

BP-L90A: 180 min

BP-IL75: 140 min

BP-M50: 70 min

BP-M100: 100 min

For four batteries

BP-L40A: 305 min

BP-L60A: 340 min

BP-L90A: 450 min

BP-IL75: 340 min

BP-M50: 280 min

BP-M100: 400 min

Operating temperature:

0 to +40°C (+32 to +104°F)

Storage temperature:

-20 to +60°C (-4 to +140°F)

Operating/storage humidity:

20% to 90% RH

Mass:

3.5 kg (7 lb 11 oz)

Dimensions:

155 (W) × 120 (H) × 330 (D) mm

(6 1/8 × 4 3/4 × 13 inches)



BKDW-702 SDI Output Board

SDI output board for Digital Betacam camcorders

Applicable Models

DVW-707P Digital Betacam Camcorder

DVW-709WS Digital Betacam 16:9/4:3

Switchable Camcorder

DVW-709WSP Digital Betacam 16:9/4:3

Switchable Camcorder

DVW-790WS Digital Betacam 16:9/4:3

Switchable Camcorder

DVW-790WSP Digital Betacam 16:9/4:3

Switchable Camcorder



BP-GL65 Rechargeable Lithium-ion Battery Pack

Features

*Intelligent "INFO" battery that communicates digitally with Sony camcorders
*Remaining capacity indication in viewfinder of the HDW-750/750P, HDW-730/730S, MSW-900/900P, PDW-510/510P, PDW-530/530P camcorders
*V-mount attaching mechanism for quick and easy battery change
*Four-step green LED indicators for quick visual verification of the battery remaining capacity (more than 80%, 60%, 40%, 20%)
*Four-step orange LED indicators for quick visual check of battery remaining capacity (below 20%, 15%, 10%, 5%)

When the BP-GL65 is used with camcorders other than those listed above, the battery alarm may not function properly.



Applicable Models

BC-M150 Ni-MH & Li-ion Battery Charger
DNW-7 Betacam SX Camcorder
DNW-7P Betacam SX Camcorder
DNW-90WS Betacam SX Camcorder
DNW-9WS Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
DNW-A25WS Betacam SX Portable Recorder
DNW-A25WSP Betacam SX Portable Recorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DVW-707P Digital Betacam Camcorder
DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder
HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900H HDCAM Camcorder
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder
SRPC-1 HD Video Processor
SRW-1 HDCAM-SR Portable VTR
WLL-CA50 Wireless Camera Transmitter (UC)
WLL-CA50 Wireless Camera Transmitter (CER)
WLL-CA55 Wireless Camera Transmitter (UC)
WLL-CA55 Wireless Camera Transmitter (CER)

Supplied

Accessories
Operation manual (1)

Specifications

Type of battery:
Rechargeable lithium-ion battery
Maximum voltage:
16.8 V
Nominal voltage:
14.4 V
Cell capacity:
65 Wh
Operating temperature (for discharge):
-10°C to +45°C (+14°F to +113°F)
Dimensions (W x H x D):
92 x 138 x 41 mm (3 5/8 x 5 1/2 x 1 5/8 inches)
Mass:
Approx. 550 g (1 lb 3 oz)
Eco-info:
Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

BP-GL95 Rechargeable Lithium-ion Battery Pack

Features

*Intelligent "INFO" battery that communicates digitally with Sony camcorders
*Remaining capacity indication on viewfinder of the HDW-750/750P, HDW-730/730S, MSW-900/900P, PDW-510/510P, PDW-530/530P camcorders
*V-mount attaching mechanism for quick and easy battery change
*Four-step green LED indicators for quick visual verification of the battery remaining capacity (more than 80%, 60%, 40%, 20%)
*Four-step orange LED indicators for quick visual check of battery remaining capacity (below 20%, 15%, 10%, 5%)

When the BP-GL95 is used with camcorders other than those listed above, the battery alarm may not function properly.



Applicable Models

BC-M150 Ni-MH & Li-ion Battery Charger
DNW-7 Betacam SX Camcorder
DNW-7P Betacam SX Camcorder
DNW-90WS Betacam SX Camcorder
DNW-9WS Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
DNW-A25WS Betacam SX Portable Recorder
DNW-A25WSP Betacam SX Portable Recorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DVW-707P Digital Betacam Camcorder
DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder
HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900H HDCAM Camcorder
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder
PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-510P XDCAM Camcorder (DVCAM Recording)
PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-V1 XDCAM Mobile Deck (Playback and File Recording)
SRPC-1 HD Video Processor
SRW-1 HDCAM-SR Portable VTR
WLL-CA50 Wireless Camera Transmitter (UC)
WLL-CA50 Wireless Camera Transmitter (CER)
WLL-CA55 Wireless Camera Transmitter (UC)
WLL-CA55 Wireless Camera Transmitter (CER)

Supplied Accessories

Operation manual (1)

Specifications

Type of battery:
Rechargeable lithium-ion battery
Maximum voltage:
16.8 V
Nominal voltage:
14.4 V
Cell capacity:
95 Wh
Operating temperature (for discharge):
-20°C to +45°C (-4°F to +113°F)
Dimensions (W x H x D):
92 x 138 x 41 mm (3 5/8 x 5 1/2 x 1 5/8 inches)
Mass:
760 g (1 lb 10 oz)
Eco-info
Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

BP-L60S Rechargeable Lithium-ion Battery Pack

Features

High capacity lithium-ion battery *Built-in LED capacity indicator for quick visual check of the battery reserve
*V-shoe attachment for quick and easy battery change
*Specially designed for compatibility with non info-lithium enabled products, so that the battery level and alarms will function correctly.



Applicable Models

BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
DNW-7 Betacam SX Camcorder
DNW-7P Betacam SX Camcorder
DNW-9WS Betacam SX Camcorder
DNW-9WSP Betacam SX Camcorder
DNW-90WS Betacam SX Camcorder
DNW-A25WS Betacam SX Portable Recorder
DNW-A25WSP Betacam SX Portable Recorder
DSR-50P DVCAM Portable Recorder
DSR-250P DVCAM Camcorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DVW-707P Digital Betacam Camcorder
DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WSP Digital Betacam 16:9/4:3
DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera
LMD-650 LCD Monitor
WLL-CA50 Wireless Camera Transmitter
WLL-CA55 Wireless Camera Transmitter

Specifications

Battery type: Lithium-ion rechargeable battery
Maximum voltage: DC 16.8 V
Nominal voltage: DC 14.4 V
Capacity: 64.8 Wh
Operating temperature: -20 to +45 °C (-4 to +113 °F)
Dimensions (W x H x D): 101 x 37.3 x 168.7 mm (4 x 1 5/16 x 6 1/2 inches)
Mass Approx. 800 g (1 lb 10 oz)

HDCA-901 HD-SDI Adaptor

Features

*HD-SDI adaptor for HDW-F900

Applicable Models

HDW-730 HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900H HDCAM Camcorder



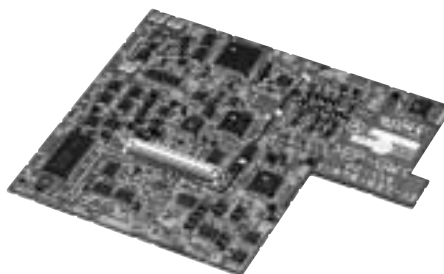
HKDW-702 Down Converter Board

Features

*Used with the HDW-750/730(S) series *Provides the HDW-750/730(S) with down-converted Standard Definition output *The output is available in SD-SDI or analog composite

Applicable Models

HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder



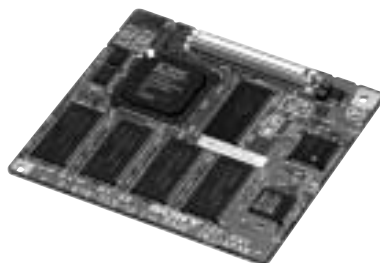
HKDW-703 Picture Cache Board

Features

*Used with the HDW-750/730(S) series *Provides up to seven seconds of loop recording using solid state memory so that scenes happening prior to the press of REC start button are captured

Applicable Models

HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder



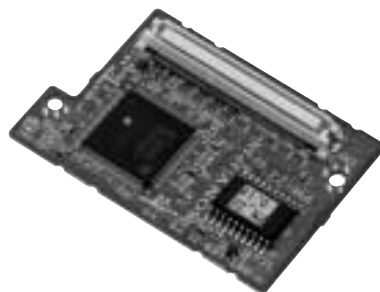
HKDW-705 Slow Shutter Board

Features

*Used with the HDW-750/730(S) camcorder *Allows to slow the shutter speed down to 64-frame period (1-, 2-, 3-, 4-, 5-, 6-, 7-, 8-, 16-, 32-, or 64-frame period) *Helps to make images in extremely dark environment *Helps to make create pictures by the intentional use of blurred images

Applicable Models

HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder



HVL-20DW2 Battery Video Light

Battery Video Light

Applicable Models

DSR-PD170P DVCAM Camcorder
HVR-Z1E HDV Camcorder



HVL-F10 Video Flash

Video Flash

Applicable Models

DSR-PDX10P DVCAM Camcorder

HVL-FH1100 Flash

The HVL-FH1100 camcorder flash docks on the camcorder's Intelligent Accessory Shoe, and the interface is designed so that when the camcorder's photo button is pressed, the light flashes in synchronization.

Applicable Models
DSR-PDX10 DVCAM Camcorder
DSR-PDX10P DVCAM Camcorder

Supplied Accessories
Operation manual (1)
Pouch (1)

Specifications
Dimensions:
W 68 x H 110 x D 92 mm (2 3/4 x 4 3/8 x 3 5/8 inches)
Mass:
190 g (6.7 oz)
Battery Power Requirements:
AA Alkaline (4)

Connector:
Intelligent Accessory Shoe

LCH-FXA Hard Carrying Case

Features

*With its specially designed interior, this case can efficiently store the video camera and accessories.

Applicable Models
HVR-Z1E



LCH-TRV950 Hard Carrying Case

Features

*With its specially designed interior, this case can efficiently store the video camera and accessories.

Applicable Models
DSR-PDX10 DVCAM Camcorder
DSR-PDX10P DVCAM Camcorder

Supplied Accessories
Key (2)
Shoulder strap (1)
Sticker (1)

Specifications
Dimensions:
W 395 x H 260 x D 205 mm (15 5/8 x 10 1/4 x 8 1/8 inches)
Mass:
2700 g (5 lb 15 oz)

LCH-VX2000A Hard Carrying Case

Hard Carrying Case

Applicable Models
DSR-PD170P DVCAM Camcorder

LCR-FXA Rain Jacket

Applicable Models
HVR-Z1E



LCR-VX2000A Rain Jacket

Rain Jacket

LCS-VCB Soft Carrying Case

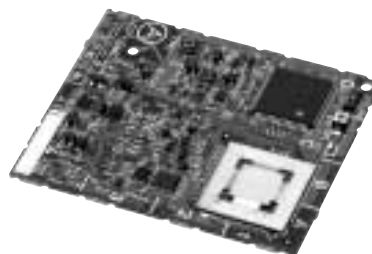
Applicable Models
HVR-Z1E



MSDW-902 SDI Output Board

SDI output board for MSW-900/900P MPEG IMX camcorder

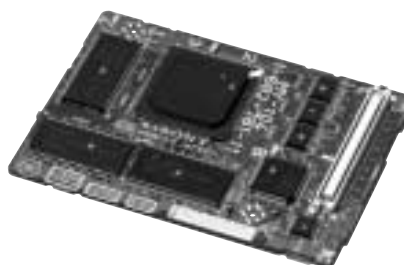
Applicable Models
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder



MSDW-903 Picture Cache Board

Picture cache board for MSW-900/900P MPEG IMX camcorder

Applicable Models
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder



MSDW-904 Analog Composite Input Board

Analog composite input board for MSW-900/900P MPEG IMX camcorder

Applicable Models
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder



NP-F570 Rechargeable Battery Pack

Applicable Models

DSR-PD170P
HVR-Z1E
HVR-M10E



NP-F770 Rechargeable Battery Pack

Applicable Models

DSR-PD170P
HVR-Z1E
HVR-M10E



NP-QM91 Rechargeable Battery Pack

Features

*Indicate the remaining capacity of the battery via 5 types of 4 LEDs indication *Indicate the charging via LEDs light

Supplied Accessories

Operation manual (*) (1)

(*)English/French

Specifications

Dimensions:

W 38.2 x H 59.5 x D 55.6 mm
(1 9/16 x 2 3/8 x 2 1/4 inches)

Mass:

225 g (7.9 oz)

Maximum output voltage:

DC 8.4 V

Capacity:

29.8 Wh (4140 mAh)

Operating Temperature:

0 to +40°C (+32°F to +104°F)



NP-QM91D Rechargeable Battery Pack

Features

*Indicate the remaining capacity of the battery via 5 types of 4 LEDs indication *Indicate the charging via LEDs light

Applicable Models

DSR-PDX10 DVCAM Camcorder

Supplied Accessories

Operation manual (1)

Specifications

Dimensions:

W 38.2 x H 59.5 x D 55.6 mm (1 9/16
x 2 3/8 x 2 1/4 inches)

Mass:

225 g (7.9 oz)

Maximum output voltage:

DC 8.4 V

Capacity:

29.8 Wh (4140 mAh)

Operating Temperature:

0 to +40°C (+32°F to +104°F)



RM-B150 Remote Control Unit

Applicable Models

BVP-E30 3-chip CCD Portable Color Camera
BVP-E30P 3-chip CCD Portable Color Camera
BVP-E30WS 3-chip CCD Portable Color Camera
BVP-E30WSP 3-chip CCD Portable Color Camera
DVW-707P Digital Betacam Camcorder
DVW-709WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-709WSP Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WS Digital Betacam 16:9/4:3 Switchable Camcorder
DVW-790WSP Digital Betacam 16:9/4:3 Switchable Camcorder
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera
HDW-250 HDCAM Digital Portable VTR
HDW-730 HDCAM Camcorder
HDW-730S HDCAM Camcorder
HDW-750 HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900H HDCAM Camcorder
MSW-900 MPEG IMX Camcorder
MSW-900P MPEG IMX Camcorder
PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-510P XDCAM Camcorder (DVCAM Recording)
PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)
SRPC-1 HD Video Processor
SRW-1 HDCAM-SR Portable VTR
WLL-RX55 Wireless Camera Receiver



RM-B750 Remote Control Unit

Features

*Designed to establish a highly mobile and fully controllable camera system in the field

Applicable Models

BVP-900 3-chip CCD Studio/OB Camera System

BVP-950 3-chip CCD Studio/OB Camera

BVP-950P 3-chip CCD Studio/OB Camera

BVP-E30 3-chip CCD Portable Color Camera

BVP-E30P 3-chip CCD Portable Color Camera

BVP-E30WS 3-chip CCD Portable Color Camera

BVP-E30WSP 3-chip CCD Portable Color Camera

DVW-709WS Digital Betacam 16:9/4:3

Switchable Camcorder

DVW-790WS Digital Betacam 16:9/4:3

Switchable Camcorder

HDC-900 3-chip CCD Studio/OB Camera System

HDC-910 3-chip CCD Studio/OB Camera System

HDC-930 3-chip CCD Studio/OB Camera System

HDC-950 3-chip CCD Studio/OB Camera System

HDC-F950 Digital 4:4:4 HD Camera System

HDC-X300 HD Multi-purpose Camera

HDC-X300K HD Multi-purpose Camera

HDW-730 HDCAM Camcorder

HDW-730S HDCAM Camcorder

HDW-750 HDCAM Camcorder

HDW-750P HDCAM Camcorder

HDW-F900H HDCAM Camcorder

MSW-900 MPEG IMX Camcorder

MSW-900P MPEG IMX Camcorder

PDW-510 XDCAM Camcorder (DVCAM

Recording)

PDW-510P XDCAM Camcorder (DVCAM

Recording)

PDW-530 XDCAM Camcorder (MPEG

IMX/DVCAM Recording)

PDW-530P XDCAM Camcorder (MPEG

IMX/DVCAM Recording)

SRPC-1 HD Video Processor

SRW-1 HDCAM-SR Portable VTR

WLL-RX55 Wireless Camera Receiver

Specifications

General

Power requirements:

DC 10.5 - 30 V (max) (supplied from camera/camcorder/CCU)

Operating temperature:

+5°C to +40 °C

Dimensions:

-20°C to +55°C

Mass:

Approx. 0.7 kg (1 lb 9 oz)

Inputs

Control interface:

8-pin (x 1), Sony Camera Command

Network Protocol

Monitor in:

BNC type (x 1) VBS (No HD signal capable)



VCL-HG0737X Wide Conversion Lens

Features

*0.7 times wide conversion lens. *Extensive Improvement of resolution.

Applicable Models

BRC-300 3-CCD Color Video Camera

DSR-PDX10 DVCAM Camcorder

DSR-PDX10P DVCAM Camcorder

Specifications

Dimension (Approx.) :

Diameter 67 mm (2 3/4 inches)

Length (Approx.):

47mm (1 7/8 inches)

Mass:

196 g (7 lb)

Supplied Accessories

Carrying case (1)

Lens Caps (for the front and back of the lens)
(2)

Operation manual (1)

VCL-HG0872 HDV Wide Conversion Lens

Applicable Models

HVR-Z1E HDV Camcorder



VCT-1170RM Video Tripod with Remote Control

Applicable Models

DSR-PD170P DVCAM Camcorder

HVR-Z1E HDV Camcorder



VCT-FXA Shoulder Brace

Applicable Models

HVR-Z1E HDV Camcorder



VF-72CPK PL Filter Kit

Applicable Models
HVR-Z1E HDV Camcorder



VF-R37K ND Filter Kit

Features

*Suppress halation caused by the overexposure that occurs in fair weather, at the seaside, on snow scape or other such locations with this ND filter. *Includes a MC Protector to prevent camera lens damage and a case.

Applicable Models
DSR-PDX10 DVCAM Camcorder
DSR-PDX10P DVCAM Camcorder

Supplied Accessories
MC Protector (1)
ND Filter (1)
Case (1)

Specifications
MC Protector
Dimension (Approx.):
Diameter 41 mm (1 5/8 inches)
Length (Approx.):
7 mm (9/32 inches)
Mass:
9 g (0.3 oz)

ND Filter
Dimension (Approx.):
Diameter 41mm (1 5/8inches)
Length (Approx.):
7 mm (9/32 inches)
Mass:
10 g (0.4 oz)

HDW-2000/1 136

HDW-D2000 138

HDW-M2000P/1 140

HDW-M2100P/1 142

HDW-S280/1 144

HKJ-101 146

HKSR-5001 146

HKSR-5002 146

HKSR-5003 147

J-H1 148

J-H3 149

SRPC-1 150

SRW-1 152

SRW-5000 154

HDW-2000/1 HDCAM VTR

Features

*Compact and affordable high-definition videocassette recorder
 *High picture quality using HDCAM format
 *Built-in down converter *1080/59.94i, 1080/50i switchable operation
 *Long recording time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
 *Versatile interfaces: HD SDI input/output, SDI output, analog component output, analog composite (NTSC/PAL) output, digital audio (AES/EBU) input/output, analog audio input/output and audio monitor output (2-ch, analog)
 *Frame-accurate editing *Pre-read editing *High speed color picture search *Dynamic Tracking playback
 *Digital jog sound *Audio crossfade function *Dynamic Motion Control (DMC) playback
 *1080/1035 line conversion *Shot mark handling *Selectable picture modes: Squeeze, letter box, and edge crop modes
 *Dolby-E/Dolby AC-3 support *Digital audio and ancillary-data recording
 *Low power consumption of 220 W
 *User-friendly control panel *Easy maintenance

Supplied Accessories

Operation manual (1)
 Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel
 HKDW-102 SDTI (HDCAM) Interface Board
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 RMM-131 Rack Mount Kit
 RCC-G Cables 9-pin/9-pin Cable
 BCT-HD tapes BCT-HD series HDCAM tapes
 BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

Specifications

General

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to + 140 °F)

Humidity:

25 to 80% (relative humidity)

Mass:

23 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed:

96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital recording/playback time:

124 minutes (59.94 Hz, with

BCT-124HDLC)

149 minutes (50 Hz, with BCT-124HDLC)

40 minutes (59.94 Hz, with BCT-40HDC)

48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:

Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode:

Still to ± 50 times normal speed

playback

Variable mode:

-1 to +2 times normal speed playback

Jog mode:

Still to ± 1 times normal speed playback

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less (both L and S cassette)

Inputs/outputs

HD-SDI input:

BNC (1), Serial Digital 1.485 Gb/s, SMPTE 292M

Reference video input:

BNC (2) (with a loop-through), Tri-level sync, 0.6 Vp-p, 75 Ω , sync negative or black burst

Digital audio input (CH 1/2, 3/4):

BNC (2), AES/EBU

Analog audio input (CH 1/2/3/4/Cue):

BNC (2) (with loop-through), AES/EBU

XLR 3-pin type, female (5)

Low off: -60 dBu, high impedance, balanced

High off: +4 dBu, high impedance, balanced

High on: +4 dBm, 600 Ω termination, balanced

Time code input:

XLR 3-pin type, female, x1, 0.5 to 18 Vp-p, 10 k Ω , balanced

HD-SDI output:

BNC (3) (SMPTE 292M including one character out), Serial Digital (1.485 Gb/s)

SDI output:

BNC (3) (SMPTE 259M including one character out), Serial Digital (270 Mb/s)

Analog composite output:

BNC (3) (RS-170A, including one character out, one WFM out)

Y: 1.0 Vp-p, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:

BNC (3), for 1 set, 1.0 Vp-p, 75 Ω , sync negative

Digital audio output (CH1/2, 3/4):

BNC (2), AES/EBU

Analog audio output (CH1/2/3/4):

XLR 3-pin type (5), male, +4 dBm (600 Ω load), low impedance, balanced

Time code output:

XLR 3-pin type, male (1) (2.2 Vp-p, low impedance balanced)

Monitor output (L/R):

XLR 3-pin type, male (2) (+4 dBm at 600 Ω load, low impedance, balanced)

Headphones:

JM-60 stereo phone jack (∞ to -12 dBu at 8 Ω load, unbalanced)

Remote 1 input:

D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:

D-sub 9-pin, Sony 9-pin remote interface

RS-232C:

D-sub 9-pin

Remote 2 Parallel I/O:

D-sub 50-pin

Video control:

D-sub 9-pin, D-sub 15-pin

Control panel:

D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:

± 3 dB/ ∞ to +3 dB, selectable

Chroma level:

± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:

± 3 IRE

Chroma phase/hue:

$\pm 30^\circ$

System sync phase:

± 15 μ s

System SC phase:

± 200 ns

Digital video performance

Sampling frequency:

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:

10 bits/sample (compression 8 bits/sample)

Compression:

Coefficient recording system

Channel coding:

S-I-NRZI PR-IV

Error correction:

Reed-Solomon code

Analog component output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

56 dB or more

K-factor (2T pulse):

1% or less

Analog composite output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2% or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

1% or less

Output SCH phase:

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Wow and flutter:

Below measurable level

Headrooms:

20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):

T1 = 50 μ s, T2 = 15 μ s

Analog audio output performance

A/D quantization:

20 bits/sample

D/A quantization:

20 bits/sample

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB
(0 dB at 1 kHz)

Dynamic range:

More than 95 dB (at 1 kHz emphasis on)

Distortion:

Less than 0.05% (at 1 kHz, emphasis on, reference level)

Crosstalk:

Less than -80 dB (at 1 kHz, between any two channels)

Cue track

Sampling frequency:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 45 dB (at 3% distortion level)

Distortion:

Less than 2% (T.H.D at 1 kHz reference level)

Wow and flutter:

Less than 0.2% rms

Erase ratio:

More than 60 dB

HDW-D2000 HDCAM VTR

Features

*Compact and affordable high-definition videocassette recorder
 *High picture quality using HDCAM format
 *Legacy playback includes Digital Betacam and MPEG IMX tapes
 *Built-in up and down converters *1080/59.94i, 1080/50i switchable operation
 *Long recording time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
 *Versatile interfaces: HD SDI input/output, SDI output, analog component output, analog composite (NTSC/PAL) output, digital audio (AES/EBU) input/output, analog audio input/output and audio monitor output (2-ch, analog)
 *Frame-accurate editing
 *Pre-read editing
 *High speed color picture search
 *Dynamic Tracking playback
 *Digital jog sound
 *Audio crossfade function
 *Dynamic Motion Control (DMC) playback
 *1080/1035 line conversion
 *Shot mark handling
 *Selectable picture modes: Squeeze, letter box, and edge crop modes
 *Dolby-E/Dolby AC-3 support
 *Digital audio and ancillary-data recording
 *Low power consumption of 220 W
 *User-friendly control panel
 *Easy maintenance



Supplied Accessories

Operation manual (1)
 Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel
 HKDW-102 SDTI (HDCAM) Interface Board
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 RMM-131 Rack Mount Kit
 RCC-G Cables 9-pin/9-pin Cable
 BCT-HD tapes BCT-HD series HDCAM tapes
 BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

Specifications

General

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to + 140 °F)

Humidity:

25 to 80% (relative humidity)

Mass:

23 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape Speed

HDCAM:

96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital Betacam:

96.7 mm/s

MPEG IMX:

64.5 mm/s (59.94 Hz), 53.8 mm/s (50 Hz)

Digital recording/playback time:

124 minutes (59.94 Hz, with BCT-124HDL)

149 minutes (50 Hz, with BCT-124HDL)

40 minutes (59.94 Hz, with BCT-40HDC)

48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:

Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode

HDCAM:

Still to ± 50 times normal speed

playback

Digital Betacam:

Still to ± 50 times normal speed

playback

MPEG IMX:

Still to ± 78 times normal speed

playback

Variable mode

HDCAM:

-1 to +2 times normal speed playback

Digital Betacam:

-1 to +3 times normal speed playback

MPEG IMX:

-1 to +3 times normal speed playback

Jog mode:

Still to ± 1 times normal speed playback

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less (both L and S cassette)

Inputs/outputs

HD-SDI input:

BNC (1), Serial Digital 1.485 Gb/s, SMPTE 292M

Reference video input:

BNC (2), (with a loop-through), Tri-level sync, 0.6 Vp-p, 75 Ω , sync negative or black burst

Digital audio input (CH 1/2, 3/4):

BNC (2), AES/EBU

Analog audio input (CH 1/2/3/4/Cue):

BNC (2) (with loop-through), AES/EBU

XLR 3-pin type, female (5)

Low off: -60 dBu, high impedance, balanced

High off: +4 dBu, high impedance, balanced

High on: +4 dBm, 600 Ω termination, balanced

Time code input:

XLR 3-pin type, female (1), 0.5 to 18 Vp-p,

10 k Ω , balanced

HD-SDI output:

BNC (3) (SMPTE 292M including one character out), Serial Digital (1.485 Gb/s)

SDI output:

BNC (3) (SMPTE 259M including one character out), Serial Digital (270 Mb/s)

Analog composite output:

BNC (3) (RS-170A, including one character out, one WFM out)

Y: 1.0 Vp-p, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:

BNC (3, for 1 set), 1.0 Vp-p, 75 Ω , sync negative

Digital audio output (CH1/2, 3/4):

BNC (2), AES/EBU

Analog audio output (CH1/2/3/4):

XLR 3-pin type (5), male, +4 dBm (600 Ω load), low impedance, balanced

Time code output:

XLR 3-pin type, male (1) (2.2 Vp-p, low impedance balanced)

Monitor output (L/R):

XLR 3-pin type, male (2) (+4 dBm at 600 Ω load, low impedance, balanced)

Headphones:

JM-60 stereo phone jack (- ∞ to -12 dBu at 8 Ω load, unbalanced)

Remote 1 input:

D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:

D-sub 9-pin, Sony 9-pin remote interface

RS-232C:

D-sub 9-pin

Remote 2 Parallel I/O:

D-sub 50-pin

Video control:

D-sub 9-pin, D-sub 15-pin

Control panel:

D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:

± 3 dB/ ∞ to +3 dB, selectable

Chroma level:

± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:

± 3 IRE

Chroma phase/hue:

$\pm 30^\circ$

System sync phase:

± 15 μ s

System SC phase:

± 200 ns

Y/C delay:

± 100 ns

Digital video performance

Sampling frequency:

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:

10 bits/sample (compression 8 bits/sample)

Compression:

Coefficient recording system

Channel coding:

S-I-NRZI PR-IV

Error correction:

Reed-Solomon code

Analog component output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

56 dB or more

K-factor (2T pulse):

1% or less

Analog composite output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2% or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

1% or less

Output SCH phase:

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Wow and flutter:

Below measurable level

Headrooms:

20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):

T1 = 50 μ s, T2 = 15 μ s

Analog audio output performance

A/D quantization:

20 bits/sample

D/A quantization:

20 bits/sample

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

(0 dB at 1 kHz)

Dynamic range:

More than 95 dB (at 1 kHz emphasis on)

Distortion:

Less than 0.05% (at 1 kHz, emphasis on, reference level)

Crosstalk:

Less than -80 dB (at 1 kHz, between any two channels)

Cue track

Sampling frequency:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 45 dB (at 3% distortion level)

Distortion:

Less than 2% (T.H.D at 1 kHz reference level)

Wow and flutter:

Less than 0.2% rms

Erase ratio:

More than 60 dB

HDW-M2000P/1 HDCAM VTR

Features

*Compact and affordable high-definition videocassette recorder
 *High picture quality using HDCAM format
 *Legacy playback includes Digital Betacam, MPEG IMX, Betacam SX, Betacam SP and Betacam tapes
 *Built-in up and down converters
 *1080/59.94i, 1080/50i switchable operation
 *Long recording time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
 *Versatile interfaces: HD SDI input/output, SDI output, analog component output, analog composite (NTSC/PAL) output, digital audio (AES/EBU) input/output, analog audio input/output and audio monitor output (2-ch, analog)
 *Frame-accurate editing
 *Pre-read editing
 *High speed color picture search
 *Dynamic Tracking playback
 *Digital jog sound
 *Audio crossfade function
 *Dynamic Motion Control (DMC) playback
 *1080/1035 line conversion
 *Shot mark handling
 *Selectable picture modes: Squeeze, letter box, and edge crop modes
 *Dolby-E/Dolby AC-3 support
 *Digital audio and ancillary-data recording
 *Low power consumption of 220 W
 *User-friendly control panel
 *Easy maintenance



Supplied Accessories

Operation manual (1)
 Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel
 HKDW-102 SDTI (HDCAM) Interface Board
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 RMM-131 Rack Mount Kit
 RCC-G Cables 9-pin/9-pin Cable
 BCT-HD tapes BCT-HD series HDCAM tapes
 BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

HDCAM VTRs

Specifications

General

Power requirements:
100 to 240 V, 50/60 Hz

Power consumption:
220 W

Operating temperature:
+5 to +40 °C (+41 to +104 °F)

Storage temperature:
-20 to +60 °C (-4 to + 140 °F)

Humidity:
25 to 80% (relative humidity)

Mass:
23 kg (50 lb 11 oz)

Dimensions:
427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape Speed

HDCAM:
96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital Betacam:
96.7 mm/s

MPEG IMX:
64.5 mm/s (59.94 Hz), 53.8 mm/s (50 Hz)

Betacam SX:
59.6 mm/s

Betacam SP/Betacam:
118.6 mm/s (59.94 Hz), 101.5 mm (50 Hz)

Digital recording/playback time:
124 minutes (59.94 Hz, with BCT-124HDLCL)
149 minutes (50 Hz, with BCT-124HDLCL)
40 minutes (59.94 Hz, with BCT-40HDC)
48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:
Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode

HDCAM:
Still to ± 50 times normal speed
playback

Digital Betacam:
Still to ± 50 times normal speed
playback

MPEG IMX:
Still to ± 78 times normal speed
playback

Betacam SX:
Still to ± 78 times normal speed
playback

Betacam SP/Betacam:
Still to ± 35 times normal speed
playback (59.94 Hz)
Still to ± 42 times normal speed
playback (50 Hz)

Variable mode

HDCAM:
-1 to +2 times normal speed playback

Digital Betacam:
-1 to +3 times normal speed playback

MPEG IMX:
-1 to +3 times normal speed playback

Betacam SX:
-1 to +2 times normal speed playback

Betacam SP/Betacam:
-1 to +3 times normal speed playback

Jog mode:
Still to ± 1 times normal speed playback

Servo lock time:
0.5 s or less (from standby on)

Load/unload time:
6 s or less (both L and S cassette)

Inputs/outputs

HD-SDI input:
BNC (1), Serial Digital 1.485 Gb/s, SMPTE 292M

Reference video input:
BNC (2), (with a loop-through), Tri-level sync, 0.6 Vp-p, 75 Ω , sync negative or black burst

Digital audio input (CH 1/2, 3/4):
BNC (2), AES/EBU

Analog audio input (CH 1/2/3/4/Cue):
BNC (2)(with loop-through), AES/EBU
XLR 3-pin type, female (5)
Low off: -60 dBu, high impedance, balanced
High off: +4 dBu, high impedance, balanced
High on: +4 dBm, 600 Ω termination, balanced

Time code input:
XLR 3-pin type, female (1), 0.5 to 18 Vp-p, 10 k Ω , balanced

HD-SDI output:
BNC (3) (SMPTE 292M including one character out), Serial Digital (1.485 Gb/s)

SDI output:
BNC (3) (SMPTE 259M including one character out), Serial Digital (270 Mb/s)

Analog composite output:
BNC (3) (RS-170A, including one character out, one WFM out)
Y: 1.0 Vp-p, sync negative,
R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:
BNC (3, for 1 set) 1.0 Vp-p, 75 Ω , sync negative

Digital audio output (CH1/2, 3/4):
BNC (2), AES/EBU

Analog audio output (CH1/2/3/4):
XLR 3-pin type, (5), male, +4 dBm (600 Ω load), low impedance, balanced

Time code output:
XLR 3-pin type, male (1) (2.2 Vp-p, low impedance balanced)

Monitor output (L/R):
XLR 3-pin type, male, (2) (+4 dBm at 600 Ω load, low impedance, balanced)

Headphones:
JM-60 stereo phone jack (∞ to -12 dBu at 8 Ω load, unbalanced)

Remote 1 input:
D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:
D-sub 9-pin, Sony 9-pin remote interface

RS-232C:
D-sub 9-pin

Remote 2 Parallel I/O:
D-sub 50-pin

Video control:
D-sub 9-pin, D-sub 15-pin

Control panel:
D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:
 ± 3 dB/ ∞ to +3 dB, selectable

Chroma level:
 ± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:
 ± 3 IRE

Chroma phase/hue:
 $\pm 30^\circ$

System sync phase:
 ± 15 μ s

System SC phase:
 ± 200 ns

Y/C delay:
 ± 100 ns

Digital video performance

Sampling frequency:
Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:
10 bits/sample (compression 8 bits/sample)

Compression:
Coefficient recording system

Channel coding:
S-I-NRZI PR-IV

Error correction:
Reed-Solomon code

Analog component output performance

Bandwidth:
Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:
56 dB or more

K-factor (2T pulse):
1% or less

Analog composite output performance

Bandwidth:
Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:
53 dB or more

Differential gain:
2% or less

Differential phase:
2% or less

Y/C delay:
20 ns or less

K-factor (2T pulse):
1% or less

Output SCH phase:
Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
20 bits/sample

Wow and flutter:
Below measurable level

Headrooms:
20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):
T1 = 50 μ s, T2 = 15 μ s

Analog audio output performance

A/D quantization:
20 bits/sample

D/A quantization:
20 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (0 dB at 1 kHz)

Dynamic range:
More than 95 dB (at 1 kHz emphasis on)

Distortion:
Less than 0.05% (at 1 kHz, emphasis on, reference level)

Crosstalk:
Less than -80 dB (at 1 kHz, between any two channels)

Cue track

Sampling frequency:
100 Hz to 12 kHz ± 3 dB

S/N ratio:
More than 45 dB (at 3% distortion level)

Distortion:
Less than 2% (T.H.D at 1 kHz reference level)

Wow and flutter:
Less than 0.2% rms

Erase ratio:
More than 60 dB

HDW-M2100P/1 HDCAM Player

Features

*Compact and affordable high-definition videocassette player
 *High picture quality using HDCAM format
 *Legacy playback includes Digital Betacam, MPEG IMX, Betacam SX, Betacam SP and Betacam tapes
 *Built-in up and down converters
 *1080/59.94i, 1080/50i switchable operation
 *Long playback time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
 *Versatile interfaces: HD SDI, SDI, analog component, analog composite (NTSC/PAL), digital audio (AES/EBU), analog audio, and audio monitor (2-ch, analog) outputs
 *High speed color picture search
 *Dynamic Tracking playback
 *Digital jog sound
 *Dynamic Motion Control (DMC) playback
 *1080/1035 line conversion
 *Shot mark handling
 *Selectable picture modes: Squeeze, letter box, and edge crop modes
 *Dolby-E/Dolby AC-3 support
 *Low power consumption of 220 W
 *User-friendly control panel
 *Easy maintenance



Supplied Accessories

Operation manual (1)
 Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel
 HKDW-102 SDTI (HDCAM) Interface Board
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 RMM-131 Rack Mount Kit
 RCC-G Cables 9-pin/9-pin Cable
 BCT-HD tapes BCT-HD series HDCAM tapes
 BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

HDCAM VTRs

Specifications

General

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to + 140 °F)

Humidity:

25 to 80% (relative humidity)

Mass:

23 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

HDCAM:

96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital Betacam:

96.7 mm/s

MPEG IMX:

64.5 mm/s (59.94 Hz), 53.8 mm/s (50 Hz)

Betacam SX:

59.6 mm/s

Betacam SP/Betacam:

118.6 mm/s (59.94 Hz), 101.5 mm (50 Hz)

Digital recording/playback time:

124 minutes (59.94 Hz, with

BCT-124HDLC)

149 minutes (50 Hz, with BCT-124HDLC)

40 minutes (59.94 Hz, with BCT-40HDC)

48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:

Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode

HDCAM:

Still to ± 50 times normal speed
playback

Digital Betacam:

Still to ± 50 times normal speed
playback

MPEG IMX:

Still to ± 78 times normal speed
playback

Betacam SX:

Still to ± 78 times normal speed
playback

Betacam SP/Betacam:

Still to ± 35 times normal speed
playback (59.94 Hz)
Still to ± 42 times normal speed
playback (50 Hz)

Variable mode

HDCAM:

-1 to +2 times normal speed
playback

Digital Betacam:

-1 to +3 times normal speed
playback

MPEG IMX:

-1 to +3 times normal speed
playback

Betacam SX:

-1 to +2 times normal speed
playback

Betacam SP/Betacam:

-1 to +3 times normal speed
playback

Jog mode:

Still to ± 1 times normal speed playback

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less (both L and S cassette)

Inputs/outputs

Time code input:

XLR 3-pin type, female (1), 0.5 to 18 Vp-p,
10 k Ω , balanced

HD-SDI output:

BNC (3) (SMPTE 292M including one
character out), Serial Digital (1.485 Gb/s)

SDI output:

BNC (3) (SMPTE 259M including one
character out), Serial Digital (270 Mb/s)

Analog composite output:

BNC (3) (RS-170A, including one character
out, one WFM out)

Y: 1.0 Vp-p, sync negative, R-Y/B-Y: 0.7
Vp-p, 75 Ω

Analog component output:

BNC (3, for 1 set), 1.0 Vp-p, 75 Ω , sync
negative

Digital audio output (CH1/2, 3/4):

BNC (2), AES/EBU

Analog audio output (CH1/2/3/4):

XLR 3-pin type (5), male, +4 dBm (600 Ω
load), low impedance, balanced

Time code output:

XLR 3-pin type, male (1) (2.2 Vp-p, low
impedance balanced)

Monitor output (L/R):

XLR 3-pin type, male (2) (+4 dBm at 600 Ω
load, low impedance, balanced)

Headphones:

JM-60 stereo phone jack ($-\infty$ to -12 dBu at
8 Ω load, unbalanced)

Remote 1 input:

D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:

D-sub 9-pin, Sony 9-pin remote interface

RS-232C:

D-sub 9-pin

Remote 2 Parallel I/O:

D-sub 50-pin

Video control:

D-sub 9-pin, D-sub 15-pin

Control panel:

D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:

± 3 dB/ ∞ to +3 dB, selectable

Chroma level:

± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:

± 3 IRE

Chroma phase/hue:

$\pm 30^\circ$

System sync phase:

± 15 μ s

System SC phase:

± 200 ns

Y/C delay:

± 100 ns

Digital video performance

Sampling frequency:

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:

10 bits/sample (compression 8 bits/sample)

Compression:

Coefficient recording system

Channel coding:

S-I-NRZI PR-IV

Error correction:

Reed-Solomon code

Analog component output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

56 dB or more

K-factor (2T pulse):

1% or less

Analog composite output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2% or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

1% or less

Output SCH phase:

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Wow and flutter:

Below measurable level

Headrooms:

20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):

T1 = 50 μ s, T2 = 15 μ s

Analog audio output performance

A/D quantization:

20 bits/sample

D/A quantization:

20 bits/sample

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB
(0 dB at 1 kHz)

Dynamic range:

More than 95 dB (at 1 kHz emphasis on)

Distortion:

Less than 0.05% (at 1 kHz, emphasis on,
reference level)

Crosstalk:

Less than -80 dB (at 1 kHz, between any
two channels)

Cue track

Sampling frequency:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 45 dB (at 3% distortion level)

Distortion:

Less than 2% (T.H.D at 1 kHz reference
level)

Wow and flutter:

Less than 0.2% rms

HDW-S280/1 HDCAM VTR

Features

*Compact and affordable high-definition videocassette recorder *Half rack width chassis *Legacy playback includes Betacam SX, Betacam SP and Betacam
 *1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF and 1080/29.97PsF switchable operation
 *Record time of up to 48 minutes at 1080/50i on an S-size cassette *HDSDI input *HDSDI, SDI and composite analogue output *AC, DC and battery operation *LCD on front panel for picture monitoring *Low power consumption of 80W *Built-in up and down converters



Optional Accessories

BKP-L55 Battery Adapter
 BP-GL95 Rechargeable Lithium-ion Battery
 BP-GL65 Rechargeable Lithium-ion Battery
 BC-M150 Ni-MH & Lithium-ion Battery Charger
 BCT-HD Series HDCAM tapes
 BCT-HD12CL Head cleaning tape for HDCAM VTRs



Specifications

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

60 W (DC operation), 80 W (AC operation)

Operating temperature:

+5 to +40°C (+41 to +104°F)

Storage temperature:

-20 to +60°C (-4 to +140°F)

Humidity:

25 to 80%

Mass:

6 kg (13 lb 4 oz)

Dimensions (W x H x D):

210 x 132 x 425 mm

(8 3/8 x 5 1/4 x 16 3/4 inches)

HDCAM record/playback time:

40 minutes (59.94 Hz), 48 minutes (50 Hz)

with BCT-40HD cassette

Fast-forward/rewind time:

Approx. 4 minutes (fast forward), 3 minutes (rewind)

Shuttle speed:

±10 times normal speed

Jog speed:

±1 time normal speed

Servo lock time:

1.0 second or less

Load/unload time:

7 seconds or less

Continuous Operating time:

80 minutes with BP-GL95 Battery

Inputs:

HD-SDI (BNC x1, with loop through),

Reference (BNC x1, with loop through),

analog audio (XLR 3-pin type, female x2),

time code (BNC x1)

Outputs:

HD-SDI (BNC x2), SD-SDI (BNC x2),

analog composite (BNC x2), analog audio

(XLR-3-pin, female x2), audio monitor

(XLR-3-pin, female x2), headphone

(JM-60 stereo phone jack, x1),

time code (BNC x1)

Remote:

RS-422 (D-sub 9-pin x1), video control

(D-sub 9-pin x1)

Others slots:

DC input (XLR-4-pin, male x1), "Memory

Stick" slot (x1)

Supplied accessories:

Operation manual, installation manual,

connector cap

Optional accessories:

BCT-6HD/12HD/22HD/32HD/40HD HDCAM

cassette, BCT-HD12CL cleaning tape,

RCC-5G remote cable, BKP-L551 battery

adaptor, BP-GL95/GL65 battery pack,

BC-M100 battery charger

HKJ-101 i.LINK Interface Board

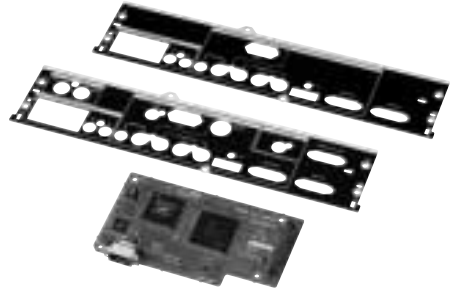
Features

*Used with the J-H1 or J-H3 *Provides i.LINK connection between J-H1/J-H3 and DV-ready NLE systems and recorders *HDCAM footage is down-converted to DV 25 Mb/s stream *Connects video, audio (Max. 4 channels) and control signals

Applicable Models

J-H1 Compact HDCAM Player

J-H3 Compact HDCAM Videocassette Player



HKSR-5001 Format Converter Board

Optional board for the SRW-5000 HD Digital Videocassette Recorder

Features

*Provides a wide range of format conversions, both upconversion and downconversion, from HD-SDI (both 1080 & 720) to SDI, and from 4:4:4 to 4:2:2 *2-3 pull-down conversion capability *1080/720P cross-conversion

Applicable Models

SRW-5000 HDCAM-SR VTR

HKSR-5002 Digital Betacam Processor Board

Optional board for the SRW-5000 HD Digital Videocassette Recorder

Features

*Provides the SRW-5000 with the capability to playback Digital Betacam tapes for output in both HD and SD

Applicable Models

SRW-5000 HDCAM-SR VTR

HKSR-5003 RGB Processor Boards

Optional boards for the SRW-5000 HD Digital
Videocassette Recorder

Features

*Provides the SRW-5000 with the capability to record and
playback RGB (4:4:4) signals

Applicable Models

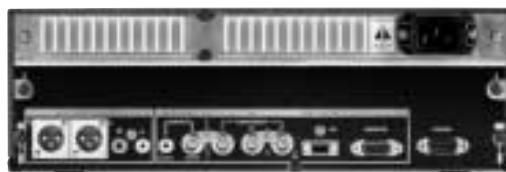
SRW-5000 HDCAM-SR VTR

J-H1 Compact HDCAM Player

The J-H1 is a cost effective, compact and lightweight HDCAM viewer ideal for desk-top use.

Features

- *HDCAM playback capability
- *Supports 1080/50i and 1080/59.9i formats
- *Accommodates both small and large cassettes
- *Versatile output capability for flexible monitoring
- *Equipped with HD analog Y/Pb/Pr component output
- *Down conversion built-in
- *NTSC or PAL composite video output from both BNC and RCA output connectors
- *Equipped with RGB computer display interface (at XGA resolution)
- *Optional i.LINK interface board (HKJ-101)
- *Shot mark handling



Supplied Accessories

- Operation manual (CD-ROM) (1)
- Vertical stand (1)

Optional Accessories

- HKJ-101 i.LINK Interface Board

Specifications

General

- Power requirements:
 - AC 100 to 240 V, 50/60 Hz
- Power consumption:
 - 50 W
- Operating temperature:
 - +5 to +40°C (+41 to +104°F)
- Storage temperature:
 - 20 to +60 °C (-4 to +140°F)
- Humidity:
 - 25 to 80% (relative humidity)
- Mass:
 - 7.5 kg (16 lb 9 oz)
- Dimensions:
 - 307(W) x 100 (H) x 397 (D) mm
 - (12 1/8 x 4 x 15 3/4 inches)
- Tape speed
 - HDCAM:
 - 96.7 mm/s (29.97 Hz)
 - 80.7mm/s (25 Hz)
- Playback time
 - HDCAM:
 - Max. 124 min (29.97 Hz, with BCT-124HDL)
 - Max. 149 min (25 Hz, with BCT-124HDL)
- Fast forward/rewind time
 - Approx. 5 min with BCT-124HD
- Search speed range
 - Shuttle mode:
 - ±21 times normal playback speed
 - Job mode:
 - ±1 times normal playback speed
- Servo lock time:
 - 1 s or less (from standby on)
- Load/unload time:
 - 7 s or less
- Input output**
 - Analog HD video:
 - BNC (x 3) Y: 0.7 Vp-p, Pb/Pr: ±0.7 Vp-p 75 Ω
 - EIAJ RC-5237 connector, EIAJ CP-4120 standard

Analog SD video:

- BNC (x 1), Pin jack (x 1), 1.0 Vp-p, 75 Ω
- Computer display:
 - D-sub 15 pin, XGA (1024 x 768 dots, RGB, 0.7 V
- i.LINK (optional):
 - IEEE1394
- Audio monitoring:
 - Pin jack (x 2): -10 dBu at 47 kΩ load, unbalanced
 - XLR (male x 2): +4 dBm, 600 Ω load, low impedance, balanced
- Headphone:
 - JM-60 stereo phone jack, -∞ to -12 dBu at 8 Ω, unbalanced
- RS-232C:
 - D-sub 9 pin male (x 1)
- Wireless remote:
 - BIRCS
- EXT SYNC:
 - BNC x 2

HD analog response

- Output level:
 - Y: 700 mV (±5%), Pb/Pr: 700 mV (±5%), Sync signal: 300 mV (±5%)
- Bandwidth:
 - Y: 0 to 20 MHz + 1.0 dB/-3.0 dB,
 - Pb/Pr: 0 to 7 MHz +1.0 dB/-3.0 dB
- S/N ratio:
 - 56 dB or more
- Output impedance:
 - Y, Pb, Pr: 75 Ω (±5%)
- Y/C delay:
 - Y, Pb, Pr: ±15 ns or less
- XGA analog response -**
 - Output level:
 - R: 700 mV (±5%), G: 700 mV (±5%), B: 700 mV (±5%)
 - Resolution:
 - XGA
 - Refresh/rate:
 - 60 Hz
 - H-frequency:
 - 48.4 kHz

SD composite response

- Output level:
 - Y: 59.94i: 714 mV (±5%), 50i: 700 mV (±5%)
 - Sync: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)
 - Burst: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)
- Bandwidth:
 - 0.5 to 5.75 MHz + 0.5 dB/-3.0 dB
- S/N ratio:
 - 56 dB or more
- Y/C delay:
 - 20 ns or less
- K Factor (2T pulse):
 - 1.0% or less

Analog audio response

- Output level:
 - XLR: +4±0.5 dBm, -20 dBFS, 600 Ω terminated
 - PIN: +10±0.5 dBu, -20 dBFS, 47 kΩ terminated
- Frequency response:
 - 20 Hz to 20 kHz + 1.0 dB/-1.5 dB
- Dynamic range:
 - More than 85 dB (at 1 kHz, emphasis ON)
- Distortion:
 - Less than 0.1% (at 1 kHz/-20 dBFS, emphasis ON)
- Wow and flutter:
 - Less than 0.18%

J-H3 Compact HDCAM Player

The J-H3 is a cost effective, compact and lightweight HDCAM viewer ideal for desk-top use. The J-H3 is equipped with a number of features to support 24P production applications.

Features

*HDCAM playback capability *Supporting 23.98/24/25/29.97PsF and 50i/59.94i formats
 *Accommodates both small and large cassettes *Versatile output capability for flexible monitoring *Equipped with HD analog Y/Pb/Pr component output *Down conversion built-in *Equipped with HD-SDI and SD-SDI outputs*NTSC or PAL composite video output from both BNC and RCA output connectors *Equipped with RGB computer display interface (at XGA resolution) *Optional i.LINK interface board (HKJ-101) *Timecode output
 *Reference input *RS-422 and RS-232C remote interface
 *LTC output *Shot mark handling *TC character superimposing capability



Supplied Accessories

Operation manual (CD-ROM) (1)
 Vertical stand (1)

Optional Accessories

HKJ-101 i.LINK Interface Board

Specifications

General

Power requirements:
 AC 100 to 240 V, 50/60 Hz
 Power consumption:
 60 W
 Operating temperature:
 +5 to +40°C (+41 to +104°F)
 Storage temperature:
 -20 to +60 °C (-4 to +140°F)
 Humidity:
 25 to 80% (relative humidity)

Mass:

7.5 kg (16 lb 9 oz)

Dimensions:

307(W) x 100 (H) x 397 (D) mm
 (12 1/8 x 4 x 15 3/4 inches)

Tape speed

HDCAM:

96.7 mm/s (29.97 Hz)
 80.7 mm/s (25Hz)
 77.4 mm/s (24 Hz)

Playback time

HDCAM:

Max. 124 min (29.97 Hz, with BCT-124HDL)
 Max. 149 min (25 Hz, with BCT-124HDL)
 Max. 155 min (24 Hz, with BCT-124HDL)

Fast forward/rewind time

Approx. 5 min with BCT-124HD

Search speed range

Shuttle mode:

±21 times normal playback speed

Job mode:

±1 times normal playback speed

Servo lock time:

1 s or less (from standby on)

Load/unload time:

7 s or less

Input output

Digital HD video:

BNC (x 1), SMPTE-292M

Digital SD video:

BNC (x 1), SMPTE-259M

Analog HD video:

BNC (x 3) Y: 0.7 Vp-p, Pb/Pr: ±0.7 Vp-p 75 Ω
 EIAJ RC-5237 connector, EIAJ CP-4120 standard

Analog SD video:

BNC (x 1), Pin jack (x 1), 1.0 Vp-p, 75 Ω

Computer display:

D-sub 15 pin, XGA (1024 x 768 dots, RGB, 0.7 V

i.LINK (optional):

IEEE1394

Time code:

BNC (x 1), SMPTE-12M

Audio monitoring:

Pin jack (x 2): -10 dBu at 47 kΩ load, unbalanced
 XLR (male x 2): +4 dBm, 600 Ω load, low impedance, balanced

Headphone:

JM-60 stereo phone jack, -∞ to -12 dBu at 8 Ω, unbalanced

RS-232C:

D-sub 9 pin male (x 1)

RS-422A:

D-sub 9 pin female (x 1), Sony 9-pin remote interface

Wireless remote:

BIRCS

EXT SYNC:

BNC x 2

HD analog response

Output level:

Y: 700 mV (±5%), Pb/Pr: 700 mV (±5%), Sync signal: 300 mV (±5%)

Bandwidth:

Y: 0 to 20 MHz + 1.0 dB/-3.0 dB, Pb/Pr: 0 to 7 MHz +1.0 dB/-3.0 dB

S/N ratio:

56 dB or more

Output impedance:

Y, Pb, Pr: 75 Ω (±5%)

Y/C delay:

Y, Pb, Pr: ±15 ns or less

XGA analog response

Output level:

R: 700 mV (±5%), G: 700 mV (±5%), B: 700 mV (±5%)

Resolution:

XGA

Refresh/rate:

60 Hz

H-frequency:

48.4 kHz

SD composite response

Output level:

Y: 59.94i: 714 mV (±5%), 50i: 700 mV (±5%)
 Sync: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)
 Burst: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)

Bandwidth:

0.5 to 5.75 MHz + 0.5 dB/-3.0 dB

S/N ratio:

56 dB or more

Y/C delay:

20 ns or less

K Factor (2T pulse):

1.0% or less

Analog audio response

Output level:

XLR: +4±0.5 dBm, -20 dBFS, 600 Ω terminated
 PIN: +10±0.5 dBu, -20 dBFS, 47 kΩ terminated

Frequency response:

20 Hz to 20 kHz + 1.0 dB/-1.5 dB

Dynamic range:

More than 85 dB (at 1 kHz, emphasis ON)

Distortion:

Less than 0.1% (at 1 kHz/-20 dBFS, emphasis ON)

Wow and flutter:

Less than 0.18%

SRPC-1 HD Video Processor

Used with the SRW-1 HD Digital Video Cassette Recorder, the SRPC-1 HD Video Processor forms the first Sony full-bandwidth HD 4:4:4 (RGB) portable VTR system. Adopting the HDCAM-SR format, the SRW-1/SRPC-1 offers virtually lossless 1080-line high-definition recordings at multiple frame rates on the very latest HDCAM-SR tape media. Offering unprecedented HD image quality, excellent operability, and powerful interfacing capabilities, the SRW-1 and SRPC-1 offer the ideal HD portable VTR system, especially for movie-making, commercial production, and high-end television production applications.

Features

- *High-quality HD field recording
- *Double speed recording
- *Multi-frame-rate 1080 HD Recording and Playback
- *12 channels of 24 bit audio

Supplied Accessories

Operational Manual (1)

Optional Accessories

BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs
 RM-B750 Remote Control Unit
 BC-M150 Ni-MH & Li-ion Battery Charger
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 RM-B150 Remote Control Unit
 AC-DN2B



Specifications

General

Power requirement:
DC +12 V (DC +11 to +17 V)

Operating temperature:
0 to +40 °C

Storage temperature
-20 to +60 °C

Humidity:
25 to 80% (relative humidity)

Mass:
8.5 kg (18 lb. 12 oz)

Dimensions (W x H x D):
279 x 399 x 139 mm (11 x 15 3/4 x 5 5/8 inches)

Recording format:
HDCAM-SR

Recording/Playback time:
Normal speed recording: 50 min. with BCT-40SR cassette (24P mode)
Double speed recording: 25 min. with BCT-40SR cassette (24P mode)

Fast forward/rewind time:
5 min.

Fast forward/rewind speed:
±11 times

Search speed (Shuttle mode):
±11 times

Input/Output signals

HD serial V/A input:
BNC x 2, Serial Digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD reference video input:
BNC x 1, Tri Level Sync, 0.6 Vp-p, 75 Ω, sync negative

SD reference video input:
BNC x 1, Black Burst, 0.286 Vp-p, 75 Ω, sync negative

Digital audio input:
BNC x 2 (AES/EBU)

Analog audio input:
XLR-3pin x 4 (female)

Time code input:
BNC (x 1), 0.5 to 18 Vp-p, 10 kΩ

HD serial V/A output:
BNC x 2, serial digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD serial V/A monitor output:
BNC x 1 (with character out), serial digital (1.485 Gb/s), SMPTE-292M/BTA-S004/ITU-R.BT709

SD serial V/A monitor output:
BNC x 1 (with character out), D1 serial digital (270 Mb/s), SMPTE-259M

Digital audio output (ch1 to ch12):
D-Sub multi connector

Analog audio monitor output
XLR-3-pin x 2 (male)

Time code output:
BNC x 1, 1.0 Vp-p (75 Ω), 2.2 Vp-p (10 kΩ)

Phones:
Stereo mini jack x 2 -17 dBu

Remote input:
D-sub 9-pin, (female), Sony 9pin remote interface

Digital video performance

Sampling frequency:
Y: 74.25 MHz, Pb/Pr: 37.125 MHz
G: 74.25 MHz, B: 74.25 MHz,
R: 74.25 MHz

Quantization:
10 bits/sample

Compression:
MPEG-4 Studio Profile

Channel coding:
S-NRZ

Error correction:
Reed-Solomon code

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
24 bits/sample

Wow and flutter:
Below measurable level

Analog audio performance (Playback with the SRW-5000 VTR)

Sampling frequency:
24 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (reference level)

Dynamic range:
More than 100 dB (1 kHz)

Distortion:
Less than 0.05% (at 1 kHz, reference level)

Crosstalk:
Less than -80 dB (at 1kHz, between any two channels)

SRW-1 HDCAM-SR Portable VTR

Used with the SRPC-1 HD Video Processor, the SRW-1 HD Digital Video Cassette Recorder forms the first Sony full-bandwidth HD 4:4:4 (RGB) portable VTR system. Adopting the HDCAM-SR format, the SRW-1/SRPC-1 offers virtually lossless 1080-line high-definition recordings at multiple frame rates on the very latest HDCAM-SR tape media. Offering unprecedented HD image quality, excellent operability, and powerful interfacing capabilities, the SRW-1 and SRPC-1 offer the ideal HD portable VTR system, especially for movie-making, commercial production, and high-end television production applications.

Features

- *High-quality HD field recording
- *Double speed recording
- *Multi-frame-rate 1080 HD Recording and Playback
- *12 channels of 24 bit audio

Supplied Accessories

Operational Manual (1)

Optional Accessories

BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

RM-B750 Remote Control Unit

BC-M150 Ni-MH & Li-ion Battery Charger

BP-GL95 Rechargeable Lithium-ion Battery Pack

BP-GL65 Rechargeable Lithium-ion Battery Pack

RM-B150 Remote Control Unit

AC-DN2B



Specifications

General

Power requirement:
DC +12 V (DC +11 to +17 V)

Operating temperature:
0 to +40 °C

Storage temperature:
-20 to +60 °C

Humidity:
25 to 80% (relative humidity)

Mass:
8.5 kg (18 lb. 12 oz)

Dimensions (W x H x D):
279 x 399 x 139 mm (11 x 15 3/4 x 5 5/8 inches)

Recording format:
HDCAM-SR

Recording/Playback time:
Normal speed recording: 50 min. with BCT-40SR cassette (24P mode)
Double speed recording: 25 min. with BCT-40SR cassette (24P mode)

Fast forward/rewind time:
5 min.

Fast forward/rewind speed:
±11 times

Search speed (Shuttle mode):
±11 times

Input/Output signals

HD serial V/A input:
BNC x 2, Serial Digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD reference video input:
BNC x 1, Tri Level Sync, 0.6 Vp-p, 75 Ω, sync negative

SD reference video input:
BNC x 1, Black Burst, 0.286 Vp-p, 75 Ω, sync negative

Digital audio input:
BNC x 2 (AES/EBU)

Analog audio input:
XLR-3-pin x 4 (female)

Time code input:
BNC (x 1), 0.5 to 18 Vp-p, 10 kΩ

HD serial V/A output:
BNC x 2, serial digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD serial V/A monitor output:
BNC x 1 (with character out), serial digital (1.485 Gb/s), SMPTE-292M/BTA-S004/ITU-R.BT709

SD serial V/A monitor output:
BNC x 1 (with character out), D1 serial digital (270 Mb/s), SMPTE-259M

Digital audio output (ch1 to ch12):
D-Sub multi connector

Analog audio monitor output:
XLR-3pin x 2 (male)

Time code output:
BNC x 1, 1.0 Vp-p (75 Ω), 2.2 Vp-p (10 kΩ)

Phones:
Stereo mini jack x 2 -17 dBu

Remote input:
D-sub 9-pin, (female), Sony 9pin remote interface

Digital video performance

Sampling frequency:
Y: 74.25 MHz, Pb/Pr: 37.125 MHz
G: 74.25 MHz, B: 74.25 MHz, R: 74.25 MHz

Quantization:
10 bits/sample

Compression:
MPEG-4 Studio Profile

Channel coding:
S-NRZ

Error correction:
Reed-Solomon code

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
24 bits/sample

Wow and flutter:
Below measurable level

Analog audio performance (Playback with the SRW-5000 VTR)

Sampling frequency:
24 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (reference level)

Dynamic range:
More than 100 dB (1 kHz)

Distortion:
Less than 0.05% (at 1 kHz, reference level)

Crosstalk:
Less than -80 dB (at 1kHz, between any two channels)

SRW-5000 HDCAM-SR VTR

The SRW-5000 is a high-end HD digital videocassette recorder that employs the HDCAM-SR format. Applications range from HDTV to digital cinematography. Key features include high-quality 1080i, 1080P, or 720P recording and playback, a wide array of internal format conversions, including 4:4:4 to 4:2:2, legacy playback of HDCAM and Digital BETACAM tape formats.

Features

- *1080 recording and playback at multiple frame rates: 23.98P, 24P, 25P, 29.97P, 50i, 59.94i
- *720P recording and playback
- *Switchable 4:4:4/4:2:2 recording
- *New HDCAM-SR tape format
- *High-quality MPEG-4 Studio Profile compression
- *12-channels of 24-bit audio at 48kHz
- *Internal format conversion
- *Legacy playback
- *Long recording time on a single cassette of up to 155 minutes at 1080/24P
- *User-friendly controls
- *Frame-accurate insert/assemble editing
- *High-speed color picture search
- *Dynamic Tracking playback
- *Digital-Jog Sound
- *Dynamic Motion Control (DMC) playback
- *Pre-read editing
- *Confidence playback
- *Selectable picture modes including squeeze, letter box, and edge crop
- *Audio-output channel routing; can route audio to any HD-SDI or SDI output
- *Dual-sync operation
- *Off-speed playback capability
- *Built-in Tele-File read/write capability
- *Metadata Handling
- *Newly designed DT-Head
- *New tape formula
- *Easy maintenance

Supplied Accessories

- PSW4 x 16screws, for rack mounting (4)
- CD-ROM (Operation manual & Maintenance manual part 1) (1)
- Memory Stick/PC Card adapter (1)

Optional Accessories

- HKSR-5001 Format Converter Board
- HKSR-5002 Digital BETACAM Processor Board
- HKSR-5003 RGB Processor Boards
- RMM-110 Rack Mount Kit
- BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs



Specifications

General

Power requirements:
100 to 240 V AC ($\pm 10\%$, 50/60 Hz)

Power consumption:
230 W

Operating temperature:
+ 5 °C to +40 °C (+41 °F to +104 °F)

Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity:
25% to 80% (relative humidity)

Mass (approx.):
30 kg (66 lb. 2 oz)

Dimensions (W x H x D excluding protrusions):
427 x 218 x 544 mm (16 3/4 x 8 5/8 x 21 1/2 inches)

Tape speed:
94.2 mm/s (24P mode)

Digital recording/Playback time:
Max. 155 min with BCT-124SR cassette (24P mode)

Fast-forward/rewind time:
Approx. 3 min with BCT-124SR cassette

Search-speed range:
 ± 50 times normal playback speed (24P mode)

Servo-lock time:
1.0 s or less (from standby on)

Load/unload time:
6.0 s or less

Input/Output

HD serial V/A input:
BNC (x 1 with monitoring loop-through),
Serial digital (1.485 Gb/s), SMPTE 292M/BTA
S-004/ITU-R.BT 709

HD/SD reference video input 1:
BNC (x 1, with loop-through), Tri Level sync,
0.6 Vp-p, 75 Ω , sync negative or Black
Burst, 0.286 Vp-p, 75 Ω , sync negative

HD/SD reference video input 2 (optional
HKSR-5001 required):
BNC (x 1, with loop-through), Black Burst,
0.286 Vp-p, 75 Ω , sync negative

Digital-audio input (CH1/2, CH3/4, CH5/6,
CH7/8, CH9/10, CH11/12):
BNC (x 6, AES/EBU)

Time-code input:
XLR-3-pin type, (female x 1), 0.5 to 18 Vp-p,
10 k Ω , balanced

HD serial V/A output:
BNC (x 3, with character out), Serial digital
(1.485 Gb/s), SMPTE 292M/BTA
S004/ITU-R.BT 709

Format-converter output (optional HKSR-5001
required):
BNC (x 2), with character out

Standard-definition V/A output:
BNC (x 3, with character out), D1 serial
digital (270 Mb/s), SMPTE 259M

Analog I/O down-converted output:
Composite: BNC (x 1 with character out)
1.0 Vp-p, 75 Ω , sync negative)
SD sync: BNC (x 1, Black Burst, 0.286 Vp-p,
75 Ω , sync negative)

Analog I/O reference output:
1125 Sync: BNC (x2), Tri Level sync, 0.6
Vp-p, 75 Ω , sync negative

Digital-audio output (CH1/2 CH3/4 CH5/6
CH7/8 CH9/10 CH11/12):
BNC (x 6), AES/EBU, unbalanced

Analog-audio output (CH1/2/3/4/Cue):
XLR-3-pin type, (male x 5), +4 dBm, (with a
600 Ω load), low impedance, balanced

Monitor output (L/R):
XLR-3-pin type, (male x 2), +4 dBm, (with a
600 Ω load), low impedance, balanced

Time-code output:
XLR-3-pin type, (male x 1), 2.2 Vp-p low
impedance, balanced

Phones:
JM-60 stereo phone jack, - ∞ to -12 dBu
(with an 8 Ω load), unbalanced

Remote 1 input:
D-sub 9-pin, (female), Sony 9-pin remote
interface

Remote 1 input/output:
D-sub 9-pin, (female), Sony 9-pin remote
interface

RS-232C:
D-sub 9-pin, (male)

Video control:
D-sub 9-pin, (female), (for optional
HKDV-503)

Parallel remote:
D-sub 50-pin, (female)

Network:
10Base-T modular jack

Digital-Video Performance

Sampling frequency:
Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:
10 bits/sample

Compression:
MPEG-4 Studio Profile

Channel coding:
S-NRZ

Error correction:
Reed-Solomon code

Error concealment:
Adaptive three-dimensional

Analog Composite-Output Performance

Bandwidth
Y: 0 to 5.75 MHz +5.0 dB/-3.0 dB

S/N ratio:
56 dB or more

Y/C delay:
15 ns or less

K Factor (2T Pulse):
1 % or less

Output SCH phase:
Based upon RS-170A/CCIR R.624-3

Digital-Audio Performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
24 bits/sample

Wow & flutter:
Below measurable level

Headroom:
20 dB (or 18 dB selectable)

Analog Audio-Output Performance

D/A quantization:
24 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (0 dB at
1 kHz)

Dynamic range:
More than 100 dB (At 1 kHz)

Distortion:
Less than 0.05% (At 1 kHz, reference level)

Crosstalk:
Less than -90 dB (At 1 kHz, between any
two channels)

De-emphasis:
T1 = 50 μ s, T2 = 15 μ s (auto on/off)

SONY

PDW-1500 158
PDW-D1 160
PDW-V1 161

PDW-1500 XDCAM Compact Deck (Recording and Playback)

Features

*MPEG IMX/DVCAM recording and playback *Two optical heads allows transfer speeds of 2.5x for MPEG IMX (at 50 Mb/s) and 5x for DVCAM streams *Proxy AV (low-resolution audio and video) Data recording
 *High-speed transfer of Proxy AV Data at 50-times speed
 *Ability to write EDL data (Clip List) back onto disc
 *Metadata recording *Long recording/playback time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min.*A variety of interfaces including SDI I/O, analog composite I/O, digital audio I/O, analog audio I/O, time code I/O, headphone output, audio monitor output, Gigabit Ethernet, i.LINK (DV IN/OUT or file access mode(*1)) *Thumbnail Search operation
 *Scene Selection operation *Search speed (in color) - JOG: -1 to +2 times normal speed, Shuttle: ± 50 times normal speed *Audio clip insertion *i.LINK (DV stream) output from MPEG IMX playback

(*1) For connection with third party products using this mode, please contact your nearest Sony office.

Supplied Accessories

Operation manual (1)
 Quick manual (1)
 PDZ-1 proxy browsing software (1)
 Proxy viewer

Optional Accessories

PFD23 Disc Professional Disc
 RCC-G Cables 9-pin/9-pin Cable
 VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
 VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable



Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

75 W

Operating temperature:

+5 to +40°C (+41 to +104°F)

Storage temperature:

-20 to +60°C (-4 to +140°F)

Operating humidity:

10 to 90% (relative humidity)

Mass:

7.4 kg (16 lb 5 oz)

Dimensions (W x H x D):

210 x 130 x 415 mm

(8 3/8 x 5 1/8 x 16 3/8 inches)

Recording format

Video:

MPEG IMX (50/40/30 Mb/s), DVCAM (25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 8 ch/16 bit/48 kHz or

4 ch/24 bit/48 kHz

DVCAM: 4 ch/16 bit/48 kHz

Proxy Audio:

A-law (8/4 ch, 8 bit, 8 kHz)

Playback format

Video:

MPEG IMX (50/40/30 Mb/s), DVCAM (25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 8 ch/16 bit/48 kHz or

4 ch/24 bit/48 kHz

DVCAM: 4 ch/16 bit/48 kHz

Proxy Audio

A-law (8/4 ch, 8 bit, 8 kHz)

Recording/playback time

MPEG IMX:

50 Mb/s: 45 min., 40 Mb/s: 55 min.,

30 Mb/s: 68 min.

DVCAM:

85 min.

Search speed (in color)

Jog mode:

-1 time to 2 times normal playback speed

Shuttle mode:

±50 times normal playback speed

Signal inputs

Analog reference input:

BNC x2 (including loop through), 1.0 Vp-p,

75 Ω, sync negative

Analog composite input:

BNC x2 (including loop through), 1.0 Vp-p,

75 Ω, sync negative

SDI input:

BNC x1, SMPTE 259M, (ITU-R BT656-3), 270 Mb/s

Analog audio input:

XLR x2 (channel selectable), -9 dBu to 28 dBu, 10 kΩ, balanced

Digital audio input:

AES/EBU, BNC x2, 4 channels

Time code input:

BNC x1

Signal outputs

Analog composite video output:

BNC x2 (including one character out),

1.0 Vp-p, 75 Ω, sync negative

SDI output:

BNC x2 (including one character out),

SMPTE 259M (ITU-R BT656-3), 270 Mb/s

Analog audio output:

XLR x2 (ch. selectable), +4 dBu, 600 Ω

load, low impedance, balanced

Audio monitor output:

RCA x1 (L, R, Mix), -6 dBu, 47 kΩ,

unbalanced

Digital audio output:

BNC x2, 4 channels

Headphone output:

Jack x1, -16 dBu, 8 Ω, unbalanced

Time code output:

BNC x1

Other inputs and outputs

i.LINK:

IEEE 1394, DV IN/OUT or file access mode, 6-pin x 1

Ethernet:

1000Base-T (RJ-45 x1)

RS-422A:

D-sub 9-pin x1 (VTR protocol)

Video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed Solomon Code

Analog composite input to analog composite output

Bandwidth:

30 Hz to 4.5 MHz +0.5/-1.5 dB (NTSC)

25 Hz to 5.5 MHz +0.5/-1.5 dB (PAL)

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2° or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

2% or less

Processor adjustment range

Video level:

±3 dB

Chroma

±3 dB

Set up/black level:

±15 IRE/±105 mV

Chroma phase/hue:

±30°

System sync phase:

±15 ms

System SC phase:

±200 ns

Audio performance

Frequency response:

20 Hz to 20 kHz +0.5/-1.0 dB (0 dB at 1 kHz)

Dynamic range:

More than 90 dB

Distortion:

Less than 0.05% (at 1 kHz)

Head room:

20 dB (18 dB selectable)

"Eco Info"

Halogenated flame retardants are not used in cabinets and in printed wiring boards.

PDW-D1 XDCAM Drive

Features

Low-cost, lightweight XDCAM drive *Interfaces are i.LINK
(File Access Mode) and i.LINK AVC *DC 12V or AC

Supplied Accessories

Setup software for Windows PC
PDZ-1 Software
XDCAM Proxy Viewer
Manual

Optional Accessories

PFD23 Professional Disc
VMC-IL4615/4635 i.LINK Cable
(4-pin to 6-pin, 1.5m/3.5m)
VMC-IL6615/6635 i.LINK Cable
(6-pin to 6-pin, 1.5m/3.5m)
BKP-L551 Battery Adaptor
BP-GL65 Lithium-ion Battery Pack
BP-GL95 Lithium-ion Battery Pack
BP-L60S Lithium-ion Batter

Specifications

Power requirements
AC 100 to 240 V, 50/60Hz, DC (with
battery)

Power consumption
25W

Operating temperature
0 to 40 °C

Storage temperature
-20 to +60 °C

Humidity
20 to 90 % (relative humidity)

Mass
3.0kg (6lb 9oz)

Dimensions (W x H x D)
78 x 182 x 257 mm
(3 1/8 x 7 1/4 x 10 1/8 inches)

AVC Recording format:

Video
DVCAM (25Mb/s)

Proxy Video
MPEG-4

Audio
4ch/16bit/48kHz

Proxy Audio
A-law (4ch, 8bit, 8kHz)

File Access Mode Recording format:

Video
MPEG IMX (50/40/30Mb/s),DVCAM
(25Mb/s)

Proxy Video
MPEG-4

Audio
MPEG IMX:
8ch/16bit/48kHz or 4ch/24bit/48kHz
DVCAM:4ch/16bit/48kHz

Proxy Audio
A-law(4/8ch, 8bit, 8kHz)

Playback format

Video
MPEG IMX
(50/40/30Mb/s),DVCAM(25Mb/s)

Proxy Video
MPEG-4

Audio
MPEG IMX:
8ch/16bit/48kHz or 4ch/24bit/48kHz

DVCAM:
4ch/16bit/48kHz

Proxy Audio
A-law(4/8ch, 8bit, 8kHz)

Recording/playback time

MPEG IMX:
50Mb/s: 45 min
40Mb/s: 55 min
30Mb/s: 68 min

DVCAM:
85 min

Note: through i.LINK AVC, IMX format is
down-converted to DV format.



PDW-V1 XDCAM Mobile Deck (Playback and File Recording)

Features

*Playback of MPEG IMX/DVCAM recordings
 *High-resolution AV files (MPEG IMX/DVCAM) and Proxy AV (low-resolution audio and video) files can be recorded via its Ethernet interface or i.LINK (file access mode(*1)) interface (*2) *High-speed transfer of proxy AV data at 30-times speed *Long playback time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min. *Metadata recording *Ability to write EDL data (Clip List) back onto disc *Compact, lightweight design *Allows transfer speeds of 1.25x for MPEG IMX (at 50 Mb/s) and 2.5x for DVCAM streams (equipped with one optical head) *3.5 inch(*3) type color LCD screen for monitoring pictures and black-and-white LCD screen for displaying information such as time codes, audio meters and disc capacity *Thumbnail Search operation *Scene Selection operation *Analog RGB output capability for direct connection to computer displays
 *AC/battery-powered operation *Built-in audio speaker
 *Network connectivity (100Base-TX) *Search speed (in color) - JOG: -1 to 1 times normal speed, Shuttle: ± 20 times normal speed *i.LINK (DV stream) output from MPEG IMX playback

(*1) For connection with third party products using this mode, please contact your nearest Sony office. (*2) The PDW-V1 does not support synchronous video/audio input. (*3) Viewable area measured diagonally



Supplied Accessories

Operation manual (1)
 PDZ-1 proxy browsing software (1)
 Shoulder belt (1)
 Proxy viewer

Optional Accessories

PFD23 Disc Professional Disc
 BP-IL75 Rechargeable Lithium-ion Battery Pack
 BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BC-M50 Ni-MH & Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
 VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable

Specifications

General

Power requirements:
 AC 100 to 240 V, 50/60 Hz, DC (with battery)
 Power consumption:
 43 W
 Operating temperature:
 +0 to +40°C (+32 to +104°F)
 Storage temperature:
 -20 to +60°C (-4 to +140°F)
 Humidity:
 10 to 90% (relative humidity)
 Storage humidity:
 Less than 90%
 Mass:
 3.5 kg (7.7 lb)

Dimensions (W x H x D):

210 x 90 x 320 mm
 (8 3/8 x 3 5/8 x 12 5/8 inches)

Recording format

Proxy Video:
 MPEG-4
 Proxy Audio
 A-law (8/4 ch, 8 bit, 8 kHz)

Playback format

Video:
 MPEG IMX (50/40/30 Mb/s), DVCAM (25 Mb/s)
 Proxy Video:
 MPEG-4
 Audio:
 MPEG IMX: 8 ch/16 bit/48 kHz or 4 ch/24 bit/48 kHz
 DVCAM: 4 ch/16 bit/48 kHz
 Proxy Audio:
 A-law (8/4ch, 8 bit, 8 kHz)

Playback time

MPEG IMX:
 50 Mb/s: 45 min., 40 Mb/s: 55 min., 30 Mb/s: 68 min.

DVCAM:

85 min.

Search speed (in color)

Jog mode:
 ± 1 times normal playback speed
 Shuttle mode:
 ± 20 times normal playback speed

Signal outputs

Analog composite video:
 BNC x1 (character out), 1.0 Vp-p, 75 Ω , sync negative
 SDI output:
 BNC x1 (character out), SMPTE 259M (ITU-R BT656-3), 270 Mb/s

Analog RGB output:

D-sub 15-pin x1

Audio monitor output:

RCA x2 (L/R), -6 dBu, 47 k Ω , unbalanced

Headphone output:

Jack x1, -16 dBu, 8 Ω , unbalanced

Other inputs/outputs

i.LINK:

IEEE 1394, DV IN/OUT or file access mode, 6-pin x 1

Ethernet:

100Base-TX (RJ-45 x1)

Video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed Solomon Code

"Eco Info"

Halogenated flame retardants are not used in printed wiring boards.

SONY

PDJ-C1080 164

PDJ-C1080 Professional Disc Cart Machine

Equally suitable for both transmission and storage applications. The PDJ-C1080 Professional Disc Cart Machine combines the robustness of cart based AV playout with the advantages of the networkable non-linear XDCAM optical disc-based storage media.

Features

The PDJ-C1080 Professional Disc Cart is an automatic changer system for optical disc cartridges that features multiple video decks (PDW-1500 Professional Disc Recorders) and disc cartridge shelves called "bin units". The PDJ-C1080 has the capacity for up to 4 PDW-1500 decks, with bins to hold up to 80 discs included in the standard product. In other words, capacity is provided to load up to 113 hours of program material making this an ideal solution for automated playout & recording applications.

By using standard VCC protocol for control, the PDJ-C1080 has been designed as a "drop-in" replacement for existing flexicart systems, requiring minimal re-programming to interface with popular automation systems and reducing disruption to existing workflows.

Supplied Accessories

Operation Manual (1)
Installation Manual (1)
Anchor plate (1 set)
Eye bolt (4)

Optional Accessories

PDW-1500 Professional Disc Recorder
PFD23 Optical Disc Cartridge
RCC-5G Remote Cable (5 m)

Performance

Number of storable optical disc cartridges:
up to 80
Number of mountable video decks:
up to 4
Remote control interface:
RS-232C, RS-422A (VCC cart control protocol)
Parallel I/O interface:
D-sub 50-pin

Specifications

General

Power requirements:
100 to 240 V AC, 50/60Hz
Current drain
9 to 3.75 A (not including video decks)
Peak inrush current
Power ON, current probe method:
60 A (100V), 95 A (240V)
Hot switching inrush current, measured in accordance with European standard EN55103-1: 45 A (230V)
Dimensions:
450 x 1830 x 900 mm (w/h/d)
(17 3/4 x 72 3/4 x 35 1/2 inches)
(not including projecting parts)
Mass:
approx. 170 kg (374 lb 1 oz)
(not including video decks and optional disc cartridges)

Environmental conditions

Operating temperature:
5°C to 35°C (41°F to 95°F)
Storage temperature:
-20°C to +55°C (-4°F to +131°F)
Operating humidity:
20% to 90% (at 25°C/77°F, no condensation)
Storage humidity:
less than 75% (at 55°C/131°F or less)

Barcodes

Optical disc cartridges to be used in this Disc Cart are controlled using barcodes of the following specifications:
Code: Code 39
Print format: 16 characters x 3 lines
Narrow bar width: 0.19 mm
Character: format ASCII codes



Digital Betacam VTRs

DVW-M2000	166
DVW-M2000P	168
DVW-2000	170
DVW-2000P	172

DVW-M2000 Digital Betacam Recorder

Features

*Superb picture quality and high sound quality of Digital Betacam format
 *Powerful legacy playback capability of MPEG IMX, Betacam SX, Betacam SP and Betacam as well as Digital Betacam format
 *HD upconversion output capability (1080/59.94i, 720/59.94p)(option: *1)
 *Compact 4U height design and light weight
 *High-quality four-channel 20-bit digital audio
 *Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
 *Versatile interfaces including SDI I/O, analog component I/O, digital and analog audio I/O, time code I/O, analog composite I/O and 50-pin parallel remote interface as standard
 *Frame-accurate insert/assemble editing
 *Pre-read editing capability
 *Digital audio jog sound
 *High-speed picture search
 *Variable speed playback
 *Dynamic Motion Control (DMC) functionality
 *Easy setup using "Memory Stick" media
 *Shot mark handling
 *UMID handling
 *Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
 *Remote maintenance and monitoring over an Ethernet network using the optional BZNV-1000 ISR Proxy software
 *Optional remote control panel BKDW-101
 *Built-in signal generator
 *Can be installed in LMS and Flexicart systems



Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MSA-A "Memory Stick" IC Memory Media

BCT-D tapes BCT-D Series Digital Betacam

Tapes

Digital Betacam VTRs

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

Digital BETACAM:

96.7 mm/s

MPEG IMX:

64.467 mm/s

BETACAM SX:

59.515 mm/s

BETACAM/BETACAM SP:

118.6 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

Digital BETACAM:

±50 times normal playback speed

MPEG IMX:

±78 times normal playback speed

BETACAM SX:

±78 times normal playback speed

BETACAM/BETACAM SP:

±35 times normal playback speed

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (x2, including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analog composite output:

BNC (x3, including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analog component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analog audio input:

XLR (x4) (4CH: channel selectable)

Analog audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output:

BNC (x4), 8 channels, AES/EBU, 48 kHz fixed, complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with BVR-50 Video Controller)

D-sub 9-pin (x1, for connection with HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (BETACAM/BETACAM SP playback only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse): 1% or less

Analog component input to analog

component output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse): 1% or less, LF non-linearity: 3% or less

Analog composite input to analog composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analog input to analog output:

Frequency response (0 dB at 1 kHz): 20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 95 dB

Distortion (at 1 kHz, emphasis ON, reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two channels): Less than -80 dB, Wow & flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

DVW-M2000P Digital Betacam Recorder

Features

*Superb picture quality and high sound quality of Digital Betacam format
*Powerful legacy playback capability of MPEG IMX, Betacam SX, Betacam SP and Betacam as well as Digital Betacam format
*HD upconversion output capability (1080/50i)(option: *1)
*Compact 4U height design and light weight
*High-quality four-channel 20-bit digital audio
*Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
*Versatile interfaces including SDI I/O, analog component I/O, digital and analog audio I/O, time code I/O, analog composite I/O and 50-pin parallel remote interface as standard
*Frame-accurate insert/assemble editing
*Pre-read editing capability
*Digital audio jog sound
*High-speed picture search
*Variable speed playback
*Dynamic Motion Control (DMC) functionality
*Easy setup using "Memory Stick" media
*Shot mark handling
*UMID handling
*Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
*Remote maintenance and monitoring over an Ethernet network using the optional BZBW-1000 ISR Proxy software
*Optional remote control panel BKDW-101
*Built-in signal generator
*Can be installed in LMS and Flexicart systems

Supplied Accessories

PSW 4x16 rack mount screws (4)
Operation manual (1)
Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel
BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit
BKMW-104 HD Up-converter Board (*1)
RCC-G Cables 9-pin/9-pin Cable
RMM-131 Rack Mount Kit
MSA-A "Memory Stick" IC Memory Media
BCT-D tapes BCT-D Series Digital Betacam Tapes



Digital Betacam VTRs

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

Digital BETACAM:

96.7 mm/s

MPEG IMX:

53.776 mm/s

BETACAM SX:

59.575 mm/s

BETACAM/BETACAM SP:

101.51 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

Digital BETACAM:

±50 times normal playback speed

MPEG IMX:

±78 times normal playback speed

BETACAM SX:

±78 times normal playback speed

BETACAM/BETACAM SP:

±42 times normal playback speed

Servo lock time:

0.7 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (x2), including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analog composite output:

BNC (x3), including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analog component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analog audio input:

XLR (x4) (4CH: channel selectable)

Analog audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output:

BNC (x4), 8 channels, AES/EBU, 48 kHz fixed, complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with BVR-50P Video Controller)

D-sub 9-pin (x1, for connection with HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (BETACAM/BETACAM SP playback only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse): 1% or less

Analog component input to analog

component output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse): 1% or less, LF non-linearity: 3% or less

Analog composite input to analog composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analog input to analog output:

Frequency response (0 dB at 1 kHz): 20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 95 dB

Distortion (at 1 kHz, emphasis ON, reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two channels): Less than -80 dB, Wow & flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

DVW-2000 Digital Betacam Recorder

Features

*Superb picture quality and high sound quality of Digital Betacam format *HD upconversion output capability (1080/59.94i, 720/59.94p)(option: *1) *Compact 4U height design and light weight *High-quality four-channel 20-bit digital audio *Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette *Versatile interfaces including SDI I/O, analog component I/O, digital and analog audio I/O, time code I/O, analog composite I/O and 50-pin parallel remote interface as standard *Frame-accurate insert/assemble editing *Pre-read editing capability *Digital audio jog sound *High-speed picture search *Variable speed playback *Dynamic Motion Control (DMC) functionality *Easy setup using "Memory Stick" media *Shot mark handling *UMID handling *Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached *Remote maintenance and monitoring over an Ethernet network using the optional BZNW-1000 ISR Proxy software *Optional remote control panel BKDW-101 *Built-in signal generator *Can be installed in LMS and Flexicart systems

Supplied Accessories

PSW 4x16 rack mount screws (4)
Operation manual (1)
Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel
BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit
BKMW-104 HD Up-converter Board (*1)
RCC-G Cables 9-pin/9-pin Cable
RMM-131 Rack Mount Kit
MSA-A "Memory Stick" IC Memory Media
BCT-D tapes BCT-D Series Digital Betacam
Tapes



Digital Betacam VTRs

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

200 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

96.7 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

±50 times normal playback speed

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (x2, including one loop through output), 1.0

Vp-p, 75 Ω , sync negative

Analog composite output:

BNC (x3, including one character out), 1.0 Vp-p,

75 Ω , sync negative

Analog component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω ,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω ,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out),

SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE

259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analog audio input:

XLR (x4) (4CH: channel selectable)

Analog audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz
(32 to 48 kHz with sample rate converter),
complies with AES-3id-1995

Digital audio output:

BNC (x2), 4 channels, AES/EBU, 48 kHz fixed,
complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with BVR-50
Video Controller)

D-sub 9-pin (x1, for connection with

HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μ s

System SC phase:

±200 ns

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse):

1% or less

Analog component input to analog component
output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse):

1% or less, LF non-linearity: 3% or less

Analog composite input to analog composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T pulse):

1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analog input to analog output:

Frequency response (0 dB at 1 kHz): 20 Hz to

20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON): More

than 95 dB

Distortion (at 1 kHz, emphasis ON, reference

level): Less than 0.05%

Cross talk (at 1 kHz, between any two channels):

Less than -80 dB, Wow & flutter: Below

measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μ s, T2=15 μ s

*ISR: Interactive Status Reporting

DVW-2000P Digital Betacam Recorder

Features

*Superb picture quality and high sound quality of Digital Betacam format
*HD upconversion output capability (1080/50i)(option: *1)
*Compact 4U height design and light weight
*High-quality four-channel 20-bit digital audio
*Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
*Versatile interfaces including SDI I/O, analog component I/O, digital and analog audio I/O, time code I/O, analog composite I/O and 50-pin parallel remote interface as standard
*Frame-accurate insert/assemble editing
*Pre-read editing capability
*Digital audio jog sound
*High-speed picture search
*Variable speed playback
*Dynamic Motion Control (DMC) functionality
*Easy setup using "Memory Stick" media
*Shot mark handling
*UMID handling
*Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
*Remote maintenance and monitoring over an Ethernet network using the optional BZNW-1000 ISR Proxy software
*Optional remote control panel BKDW-101
*Built-in signal generator
*Can be installed in LMS and Flexicart systems

Supplied Accessories

PSW 4x16 rack mount screws (4)
Operation manual (1)
Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel
BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit
BKMW-104 HD Up-converter Board (*1)
RCC-G Cables 9-pin/9-pin Cable
RMM-131 Rack Mount Kit
MSA-A "Memory Stick" IC Memory Media
BCT-D tapes BCT-D Series Digital BETACAM Tapes



Digital Betacam VTRs

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

200 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

96.7 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

±50 times normal playback speed

Servo lock time:

0.7 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (x2, including one loop through output),
1.0 Vp-p, 75 Ω, sync negative

Analog composite output:

BNC (x3, including one character out), 1.0 Vp-p,
75 Ω, sync negative

Analog component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analog component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE
259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analog audio input:

XLR (x4) (4CH: channel selectable)

Analog audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz
(32 to 48 kHz with sample rate converter),
complies with AES-3id-1995

Digital audio output:

BNC (x2), 4 channels, AES/EBU, 48 kHz fixed,
complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with
BVR-50P Video Controller)

D-sub 9-pin (x1, for connection with

HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse):

1% or less

Analog component input to analog component
output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse):

1% or less, LF non-linearity: 3% or less

Analog composite input to analog composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T pulse):

1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analog input to analog output:

Frequency response (0 dB at 1 kHz): 20 Hz to

20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON): More

than 95 dB

Distortion (at 1 kHz, emphasis ON, reference

level): Less than 0.05%

Cross talk (at 1 kHz, between any two channels):

Less than -80 dB, Wow & flutter: Below

measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

SONY

MPEG IMX VTRs

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MSW-M2000P/1 MPEG IMX Recorder

Features

- *Superb picture quality and high sound quality of MPEG IMX format
- *8-bit 4:2:2 component digital recording
- *MPEG-2 4:2:2P@ML data compression at 50 Mb/s
- *SDTI-CP(*1) output allows interface with SDTI-CP equipped devices such as servers, non-linear editors
- *Data transfer at up to twice normal speed as standard
- *Legacy playback of MPEG IMX, Digital Betacam, Betacam SX, Betacam SP and Betacam formats
- *IP-network interface to allow audio and video materials to be sent and received across a standard network (option: *2)
- *HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p)(option: *3)
- *Frame-accurate insert/assemble editing
- *Pre-read editing capability
- *Eight channels of 16-bit digital audio or four channels of 24-bit digital audio
- *525/625 switchable operation
- *Variable speed control
- *High speed color picture search
- *Dynamic Motion Control (DMC)
- *Long recording and playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette
- *Compact 4U-height design
- *Versatile interfaces; analog composite I/O, analog component I/O, SDI I/O, SDTI-CP I/O, analog audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), and audio monitor (2-ch)
- *Easy setup using "Memory Stick" media
- *Shot mark handling
- *UMID handling
- *Built-in Tele-File reader/writer module to read and write information onto and from a cassette with an optional Tele-File label attached
- *Automatic scene change detect function (*4)
- *Optional remote control panel BKMW-101

(*1) Serial Data Transport Interface-Content Packages (*2) Requires optional BKMW-E3000 Network Interface Board (*3) Requires optional BKMW-104 HD Upconverter Board (*4) May require software upgrade. For details, please contact your nearest Sony office.

Supplied Accessories

PSW 4x16 rack mount screws (4)
 Operation manual (1)
 Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 BKMW-104 HD Up-converter Board (*1)
 BKMW-E3000 Network Interface Board (option for e-VTR)(*1)
 RCC-G Cables 9-pin/9-pin Cable
 RMM-131 Rack Mount Kit
 MLB-1M-100 Tele-File Memory Label
 BCT-MX tapes BCT-MX Series MPEG IMX Tapes
 MSA-A "Memory Stick" IC Memory Media



MPEG IMX VTRs

Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

2A (200 W) / AC 240 V

Operating temperature:

+5 to +40 °C (+41 to +104 ° F)

Storage temperature:

-20 to +60 °C (-4 to +140 ° F)

Humidity:

20 to 90% (relative humidity)

Mass:

23.0 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

MPEG IMX:

64.467 (525)/53.776 (625) mm/s

Digital Betacam:

96.7 mm/s

Betacam SX:

59.515 (525)/59.575 (625) mm/s

Betacam/Betacam SP:

118.6 (525)/101.51 (625) mm/s

Recording/playback time:

Max. 184 (525)/220 (625) min with

BCT-184MXL cassette

Fast forward/rewind time:

Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:

±78 times normal playback speed

Digital Betacam:

±50 times normal playback speed

Betacam SX:

±78 times normal playback speed

Betacam/Betacam SP:

±35 (525)/±42 (625) times normal
playback speed

Servo lock time:

0.5 (525)/0.7 (625) s or less (from standby
on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (2, including one loop through
output), 1.0 Vp-p, 75 Ω, sync negative

Analog composite output:

BNC (3, including one character out),
1.0 Vp-p, 75 Ω, sync negative

Analog component input:

BNC (x 3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

Analog component output:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

SDI input:

BNC (2, including one active through out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (3, including one character out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP input:

BNC (1), SMPTE 326M (SDTI-CP)

SDTI-CP output:

BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104
board):

BNC (3)

Analog audio input:

XLR (4) (4CH: channel selectable)

Analog audio output:

XLR (4) (4CH: channel selectable)

Cue audio output (only Digital Betacam

playback):

XLR (1)

Digital audio input (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), default 48 kHz (32 to 48 kHz with
sample rate converter), complies with
AES-3id-1995

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), 48 kHz fixed, Complies with
AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (2), Sony 9-pin remote
interface

RS-232C (ISR*):

D-sub 9-pin (1), RS-232C interface

Parallel remote:

D-sub 50-pin (1)

Video control (1):

D-sub 15-pin (1)

Control panel:

Circular connector 10-pin

Time code input:

XLR (1)

Time code output:

XLR (1)

Ethernet I/F (requires optional BKMW-E3000
board):

RJ-45 connector (1),

1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:

Memory Stick (1), PCMCIA (1)

Monitor output L/R:

XLR (2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/-∞ to 3 dB selectable

Chroma level:

±3 dB/-∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (Betacam/Betacam SP playback
only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

MPEG IMX/Betacam SX: 8 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz ±0.5 dB

S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less

Analog component input to analog

component output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less LF non-linearity: 3.0% or
less

Analog composite input to analog composite

output (MPEG IMX record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 53 dB or more Differential gain:

2% or less Differential phase: 2° or less

Y/C delay: 20 ns or less K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

MPEG IMX: 16 or 24 bits/sample

(selectable)

Betacam SX: 16 bits/sample

Analog input to analog output (MPEG IMX

record/playback):

A/D and D/A quantization: 24 bits/sample

Frequency response (0 dB at 1kHz): 20 Hz

to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 90 dB (16 bits mode), More than

95 dB (24bits mode)

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB

Wow and flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

MSW-A2000P/1 MPEG IMX Recorder

Features

*Superb picture quality and high sound quality of MPEG IMX format *8-bit 4:2:2 component digital recording
 *MPEG-2 4:2:2P@ML data compression at 50 Mb/s
 *SDTI-CP(*1) output allows interface with SDTI-CP equipped devices such as servers, non-linear editors
 *Data transfer at up to twice normal speed as standard
 *Legacy playback capability of MPEG IMX, Betacam SX, Betacam SP and Betacam formats *IP-network interface to allow audio and video materials to be sent and received across a standard network (option: *2) *HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p) (option: *3) *Frame-accurate insert/assemble editing *Pre-read editing capability *Eight channels of 16-bit digital audio or four channels of 24-bit digital audio
 *525/625 switchable operation *Variable speed control
 *High speed color picture search *Dynamic Motion Control (DMC) *Long recording and playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette
 *Compact 4U-height design *Versatile interfaces; analog composite I/O, analog component I/O, SDI I/O, SDTI-CP I/O, analog audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), and audio monitor (2-ch) *Easy setup using "Memory Stick" media *Shot mark handling *UMID handling *Built-in Tele-File reader/writer module to read and write information onto and from a cassette with an optional Tele-File label attached *Automatic scene change detect function (*4) *Optional remote control panel BKMW-101

(*1) Serial Data Transport Interface-Content Packages (*2) Requires optional BKMW-E3000 Network Interface Board (*3) Requires optional BKMW-104 HD Upconverter Board (*4) May require software upgrade. For details, please contact your nearest Sony office.

Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board (*1)

BKMW-E3000 Network Interface Board (option for e-VTR)(*1)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MLB-1M-100 Tele-File Memory Label

BCT-MX tapes BCT-MX Series MPEG IMX

Tapes

MSA-A "Memory Stick" IC Memory Media



MPEG IMX VTRs

Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

2A (200 W) / AC 240 V

Operating temperature:

+5 to +40 °C (+41 to +104 ° F)

Storage temperature:

-20 to +60 °C (-4 to +140 ° F)

Humidity:

20 to 90% (relative humidity)

Mass:

23.0 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

MPEG IMX:

64.467 (525)/53.776 (625) mm/s

Betacam SX:

59.515 (525)/59.575 (625) mm/s

Betacam/Betacam SP:

118.6 (525)/101.51 (625) mm/s

Recording/playback time:

Max. 184 (525)/220 (625) min with

BCT-184MXL cassette

Fast forward/rewind time:

Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:

±78 times normal playback speed

Betacam SX:

±78 times normal playback speed

Betacam/Betacam SP:

±35 (525)/±42 (625) times normal
playback speed

Servo lock time:

0.5 (525)/0.7 (625) s or less (from standby
on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (2, including one loop through
output), 1.0 Vp-p, 75 Ω, sync negative

Analog composite output:

BNC (3, including one character out),
1.0 Vp-p, 75 Ω, sync negative

Analog component input:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

Analog component output:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

SDI input:

BNC (2, including one active through out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (3, including one character out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP input:

BNC (1), SMPTE 326M (SDTI-CP)

SDTI-CP output:

BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104
board):

BNC (3)

Analog audio input:

XLR (4) (4CH: channel selectable)

Analog audio output:

XLR (4) (4CH: channel selectable)

Digital audio input (CH 1/2, 3/4, 5/6, 7/8),
AES/EBU:

BNC (4), default 48 kHz (32 to 48 kHz with
sample rate converter), complies with
AES-3id-1995

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),
AES/EBU:

BNC (4), 48 kHz fixed, Complies with
AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (2), Sony 9-pin remote
interface

RS-232C (ISR)*:

D-sub 9-pin (1), RS-232C interface

Parallel remote:

D-sub 50-pin (1)

Video control (1):

D-sub 15-pin (1)

Control panel:

Circular connector 10-pin

Time code input:

XLR (1)

Time code output:

XLR (1)

Ethernet I/F (requires optional BKMW-E3000
board):

RJ-45 (1),

1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:

Memory Stick (1), PCMCIA (1)

Monitor output L/R:

XLR (2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/-∞ to 3 dB selectable

Chroma level:

±3 dB/-∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (Betacam/Betacam SP playback
only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

MPEG IMX/Betacam SX: 8 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz ±0.5 dB

S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less

Analog component input to analog

component output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more K-factor (2T

pulse): 1% or less LF non-linearity: 3.0% or
less

Analog composite input to analog composite
output (MPEG IMX record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 53 dB or more Differential gain:

2% or less Differential phase: 2° or less

Y/C delay: 20 ns or less K-factor (2T
pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

MPEG IMX: 16 or 24 bits/sample
(selectable)

Betacam SX: 16 bits/sample

Analog input to analog output (MPEG IMX
record/playback):

A/D and D/A quantization: 24 bits/sample

Frequency response (0 dB at 1kHz): 20 Hz
to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 90 dB (16 bits mode), More than

95 dB (24bits mode)

Distortion (at 1 kHz, emphasis ON,
reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB

Wow and flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

MSW-2000 MPEG IMX Recorder

Features

*Superb picture quality and high sound quality of MPEG IMX format *8-bit 4:2:2 component digital recording *MPEG-2 4:2:2P@ML compression at 50 Mb/s *SDTI-CP (Serial Data Transport Interface-Content Packages) output allows interface with other SDTI-CP equipped devices such as servers, non-linear editors *Data transfer at up to twice normal speed (option: *1) *Legacy playback of MPEG IMX and Betacam SX formats *IP-network interface to allow audio and video materials to be sent and received across a standard network (option: *2) *HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p)(option: *3) *Frame-accurate insert/assemble editing *Pre-read editing capability *Eight channels of 16-bit digital audio or four channels of 24-bit digital audio *525/625 switchable operation *Variable speed control *High speed color picture search *Dynamic Motion Control (DMC) *Long recording and playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette *Compact 4U-height design *Versatile interfaces; analog composite I/O, analog component I/O, SDI I/O, SDTI-CP I/O, analog audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), and audio monitor (2-ch) *UMID handling *Shot mark handling *Built-in Tele-File reader/writer module to read and write information onto and from a cassette with an optional Tele-File label attached *Optional remote control panel BKMW-101

(*1) requires a DPR-208 board (service part) (*2) requires optional BKMW-E3000 Network Interface Board (*3) requires optional BKMW-104 HD Upconverter Board



Supplied Accessories

PSW 4x16 rack mount screws (4)
Operation manual (1)
Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel
BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit
BKMW-104 HD Up-converter Board (*1)
BKMW-105 High Speed Feed Board
BKMW-E3000 Network Interface Board
(option for e-VTR)(*1)
RCC-G Cables 9-pin/9-pin Cable
RMM-131 Rack Mount Kit
MLB-1M-100 Tele-File Memory Label
BCT-MX tapes BCT-MX Series MPEG IMX
Tapes

MPEG IMX VTRs

Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

2A (200 W) / AC 240 V

Operating temperature:

+5 to +40 °C (+41 to +104 ° F)

Storage temperature:

-20 to +60 °C (-4 to +140 ° F)

Humidity:

20 to 90% (relative humidity)

Mass:

23.0 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

MPEG IMX:

64.467 (525)/53.776 (625) mm/s

Betacam SX:

59.515 (525)/59.575 (625) mm/s

Recording/playback time:

Max. 184 (525)/220 (625) min with
BCT-184MXL cassette

Fast forward/rewind time:

Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:

±78 times normal playback speed

Betacam SX:

±78 times normal playback speed

Servo lock time:

0.5 (525)/0.7 (625) s or less (from standby
on)

Load/unload time:

6 s or less

Input/output signals

Analog composite input:

BNC (2, including one loop through
output), 1.0 Vp-p, 75 Ω, sync negative

Analog composite output:

BNC (3, including one character out),
1.0 Vp-p, 75 Ω, sync negative

Analog component input:

BNC (x 3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

Analog component output:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

SDI input:

BNC (2, including one active through out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (3, including one character out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP input:

BNC (1), SMPTE 326M (SDTI-CP)

SDTI-CP output:

BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104
board):

BNC (x3)

Analog audio input:

XLR (4) (4CH: channel selectable)

Analog audio output:

XLR (4) (4CH: channel selectable)

Digital audio input (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), default 48 kHz (32 to 48 kHz with
sample rate converter), complies with
AES-3id-1995

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),
AES/EBU:

BNC (4), 48 kHz fixed, Complies with
AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (2), Sony 9-pin remote
interface

RS-232C (ISR*):

D-sub 9-pin (1), RS-232C interface

Parallel remote:

D-sub 50-pin (1)

Video control (1):

D-sub 15-pin (1)

Control panel:

Circular connector 10-pin

Time code input:

XLR (1)

Time code output:

XLR (1)

Ethernet I/F (requires optional BKMW-E3000
board):

RJ-45 (1),

1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:

Memory Stick (1), PCMCIA (1)

Monitor output L/R:

XLR (2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/-∞ to 3 dB selectable

Chroma level:

±3 dB/-∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

MPEG IMX/Betacam SX: 8 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz ±0.5 dB

S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less

Analog component input to analog

component output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more K-factor (2T

pulse): 1% or less LF non-linearity: 3.0% or
less

Analog composite input to analog composite

output (MPEG IMX record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 53 dB or more Differential gain:

2% or less Differential phase: 2° or less

Y/C delay: 20 ns or less K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

MPEG IMX: 16 or 24 bits/sample
(selectable)

Betacam SX: 16 bits/sample

Analog input to analog output (MPEG IMX
record/playback):

A/D and D/A quantization: 24 bits/sample

Frequency response (0 dB at 1 kHz): 20 Hz
to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 90 dB (16 bits mode), More than
95 dB (24bits mode)

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB

Wow and flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

MSW-M2100P/1 MPEG IMX Player

Features

*Superb picture quality and high sound quality of MPEG IMX format *Legacy playback capability; MPEG IMX, Digital Betacam, Betacam SX, Betacam SP and Betacam formats *SDTI-CP(*1) output to allow interface with SDTI-CP equipped devices such as servers, non-linear editors *Data transfer at up to twice normal speed as standard *IP-network interface to allow audio and video materials to be sent across a standard network (option: *2) *HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p)(option: *3) *Versatile interfaces; analog composite output, analog component output, SDI output, SDTI-CP output, analog audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), audio monitor (2-ch), RS-422A (Sony 9-pin), RS-232C, and parallel 50-pin *Eight channels of 16-bit digital audio or four channels of 24-bit digital audio *525/625 switchable operation *Variable speed control *High speed picture search *Dynamic Motion Control (DMC) *Long playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette *Compact 4U-height design *Easy setup using "Memory Stick" media *Shot Mark handling *Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached *Automatic scene change detect fuction(*4) *Optional remote panel BKMW-101

(*1) Serial Data Transport Interface-Content Packages (*2) Requires optional BKMW-E3000 Network Interface Board (*3) Requires optional BKMW-104 HD Upconverter Board (*4) May require software upgrade. For details, please contact your nearest Sony office.

Supplied Accessories

PSW 4x16 rack mount screws (4)
Operation manual (1)
Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel
BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit
BKMW-104 HD Up-converter Board (*1)
BKMW-E3000 Network Interface Board
(option for e-VTR)(*1)
RCC-G Cables 9-pin/9-pin Cable
RMM-131 Rack Mount Kit
MLB-1M-100 Tele-File Memory Label
BCT-MX tapes BCT-MX Series MPEG IMX
Tapes
MSA-A "Memory Stick" IC Memory Media



Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

2A (200 W) / AC 240 V

Operating temperature:

+5 to +40 °C (+41 to +104 ° F)

Storage temperature:

-20 to +60 °C (-4 to +140 ° F)

Humidity:

20 to 90% (relative humidity)

Mass:

23.0 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

MPEG IMX:

64.467 (525)/53.776 (625) mm/s

Digital Betacam:

96.7 mm/s

Betacam SX:

59.515 (525)/59.575 (625) mm/s

Betacam/Betacam SP:

118.6 (525)/101.51 (625) mm/s

Playback time:

Max. 184 (525)/220 (625) min with

BCT-184MXL cassette

Fast forward/rewind time:

Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:

±78 times normal playback speed

Digital Betacam:

±50 times normal playback speed

Betacam SX:

±78 times normal playback speed

Betacam/Betacam SP:

±35 (525)/±42 (625) times normal
playback speed

Servo lock time:

0.5 (525)/0.7 (625) s or less (from standby
on)

Load/unload time:

6 s or less

Output signals

Analog composite output:

BNC (3, including one character out),
1.0 Vp-p, 75 Ω, sync negative

Analog component output:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

SDI output:

BNC (3, including one character out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP output:

BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104
board):

BNC (3)

Analog audio input:

XLR (4) (4CH: channel selectable)

Analog audio output:

XLR (4) (4CH: channel selectable)

Cue audio output:

XLR (1, only Digital Betacam playback)

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), 48 kHz fixed, Complies with
AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (2), Sony 9-pin remote
interface

RS-232C (ISR*):

D-sub 9-pin (1), RS-232C interface

Parallel remote:

D-sub 50-pin (1)

Video control (1):

D-sub 15-pin (1)

Control panel:

Circular connector 10-pin

Time code input:

XLR (1)

Time code output:

XLR (1)

Ethernet I/F (requires optional BKMW-E3000
board):

RJ-45 (1),

1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:

Memory Stick (1), PCMCIA (1)

Monitor output L/R:

XLR (2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/-∞ to 3 dB selectable

Chroma level:

±3 dB/-∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (Betacam/Betacam SP playback
only)

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

MPEG IMX/BETACAM SX: 8 bits/sample,

Digital BETACAM: 10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analog component output:

D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz ±0.5 dB

S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less

Analog component input to analog

component output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less LF non-linearity: 3.0% or
less

Analog composite input to analog composite

output (MPEG IMX record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 53 dB or more Differential gain:

2% or less Differential phase: 2° or less

Y/C delay: 20 ns or less K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

MPEG IMX: 16 or 24 bits/sample

(selectable)

Betacam SX: 16 bits/sample

Digital Betacam: 20 bits/sample

Analog composite output (Digital Betacam
playback):

A/D and D/A quantization: 24 bits/sample

Frequency response (0 dB at 1 kHz): 20 Hz
to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 95 dB

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB

Wow and flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

*ISR: Interactive Status Reporting

SONY

J-series Compact Players

J-30	186
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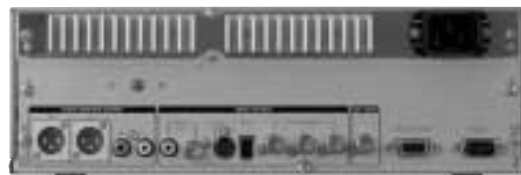
J-30 1/2" Standard Definition Compact Player

The J-30 Compact Player is an affordable, compact office viewer to be used by producers, journalists and production staff. Retaining the fundamental features of its predecessor designed for viewing, logging and source feeding to the nonlinear editors, the J-30 adds the i.LINK interface, opening the door to the DV World for the Betacam users. In addition, the J-30 has enhanced interfacing capability and operational versatility.



Features

*DV-device connectivity *Powerful playback capability (Betacam, Betacam SP, Betacam SX, MPEG IMX and Digital Betacam formats) *Compact body design *Replay of both small and large cassettes *525/625 versatility *Analog component output *Supports wireless infrared remote controller *Flexible audio outputs



Supplied Accessories

Infrared Remote Controller (1)

Specifications

General

Power requirement:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

55 W

Operating temperature:

+5 °C to +40 °C (+41 °F to +104 °F)

Humidity:

25% to 80% (relative humidity)

Mass:

8.2 kg (18 lb 1 oz)

Dimension (W x H x D):

307 x 100 x 397 mm (12 1/8 x 4 x 15 3/4 inches)

Tape speed:

Digital Betacam: 96.7 mm/s

MPEG IMX: 64.467 mm/s (525 mode),

53.776 mm/s (625 mode)

Betacam SX: 59.515 mm/s (525 mode),

59.575 mm/s (625 mode)

Betacam/Betacam SP: 118.6 mm/s,

101.5 mm/s (625 mode)

Playback time:

Digital Betacam: Max. 124 min. with

BCT-D124L

MPEG IMX: Max. 184 min. (525 mode)/220

min. (625 mode) with BCT-184MXL

Betacam SX: Max. 194 min. with

BCT-194SXLA

Betacam/Betacam SP: Max. 90 min. (525

mode)/108 min. (625 mode) with

BCT-90MLA

Fast forward/rewind:

Digital Betacam: Approx. 5 min. with

BCT-D124L

MPEG IMX: Approx. 5 min. with

BCT-184MXL

Betacam SX: Approx. 5 min. with

BCT-184SXLA

Betacam/Betacam SP: Approx. 5 min. with

BCT-90MLA

Search speed range:

Digital Betacam: ± 21 times normal

playback speed

MPEG IMX: ± 32 times normal playback

speed

Betacam SX: ± 35 times normal playback

speed

Betacam/Betacam SP: ± 18 times (525

mode), ± 20 times (625 mode) normal

playback speed

Servo lock time:

1.5 s or less (from standby on)

Load/unload time:

7 s or less

Input signal

Ext. sync:

BNC (x 1), Frame lock

Output signal

Analog composite:

BNC (x 1), Pin Jack (x 1), 1.0 Vp-p, 75 Ω

S-video output:

Mini DIN 4-pin (x 1), Y: 1.0 Vp-p, C: 0.286

Vp-p burst, 75 Ω

Analog component output:

BNC (x 3), Y: 1.0 Vp-p, R-Y/B-Y: 0.7 Vp-p,

75 Ω

i.LINK (DV) output:

6-pin (x 1), IEEE 1394

Monitor output L/R:

Pin Jack (x 2): -10 dBu at 47 k Ω load,

unbalanced, XLR (male x 2): +4 dBm, 600

Ω load, low impedance, balanced

Headphone output:

JM-60 Stereo Phone Jack, $-\infty$ to -12 dBu at

8 Ω load, unbalanced

Remote Control

RS-422A:

D-sub 9-pin (female) (x 1), Sony 9-pin

remote interface

RS-232C:

D-sub 9-pin (male) (x 1)

Wireless:

SIRCS

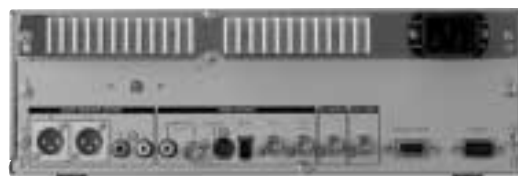
J-30/SDI 1/2" Standard Definition Compact Player

The J-30SDI Compact Player is an affordable, compact office viewer to be used by producers, journalists and production staff. Retaining the fundamental features of its predecessor designed for viewing, logging and source feeding to the nonlinear editors, the J-30/SDI adds the i.LINK interface, opening the door to the DV World for the Betacam users. In addition, the J-30/SDI has enhanced interfacing capability and operational versatility.



Features

*DV-device connectivity *Powerful playback capability (Betacam, Betacam SP, Betacam SX, MPEG IMX and Digital Betacam formats) *Compact body design *Replay of both small and large cassettes *525/625 versatility *SDI outputs (x 2) *Supports wireless infrared remote controller *Flexible audio outputs *UMID and Essence mark readable



Supplied Accessories

Infrared Remote Controller (1)

Specifications

General

Power requirement:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

55 W

Operating temperature:

+5 °C to +40 °C (+41 °F to +104 °F)

Humidity:

25% to 80% (relative humidity)

Mass:

8.2 kg (18 lb 1 oz)

Dimension (W x H x D):

307 x 100 x 397 mm (12 1/8 x 4 x 15 3/4 inches)

Tape speed:

Digital Betacam: 96.7 mm/s

MPEG IMX: 64.467 mm/s (525 mode),

53.776 mm/s (625 mode)

Betacam SX: 59.515 mm/s (525 mode),

59.575 mm/s (625 mode)

Betacam/Betacam SP: 118.6 mm/s,

101.5 mm/s (625 mode)

Playback time:

Digital Betacam: Max. 124 min. with

BCT-D124L

MPEG IMX: Max. 184 min. (525 mode)/220

min. (625 mode) with BCT-184MXL

Betacam SX: Max. 194 min. with

BCT-194SXL

Betacam/Betacam SP: Max. 90 min. (525

mode)/108 min. (625 mode) with

BCT-90MLA

Fast forward/rewind:

Digital Betacam: Approx. 5 min. with

BCT-D124L

MPEG IMX: Approx. 5 min. with

BCT-184MXL

Betacam SX: Approx. 5 min. with

BCT-184SXL

Betacam/Betacam SP: Approx. 5 min. with

BCT-90MLA

Search speed range:

Digital Betacam: ± 21 times normal

playback speed

MPEG IMX: ± 32 times normal playback

speed

Betacam SX: ± 35 times normal playback

speed

Betacam/Betacam SP: ± 18 times (525

mode), ± 20 times (625 mode) normal

playback speed

Servo lock time:

1.5 s or less (from standby on)

Load/unload time:

7 s or less

Input signal

Ext. sync:

BNC (x 1), Frame lock

Output signal

Analog composite:

BNC (x 1), Pin Jack (x 1), 1.0 Vp-p, 75 Ω

S-video output:

Mini DIN 4-pin (x 1), Y: 1.0 Vp-p, C: 0.286

Vp-p burst, 75 Ω

SDI output:

BNC (x 2), SMPTE 259M, 270 Mb/s, 0.8

Vp-p, 75 Ω

i.LINK (DV) output:

6-pin (x 1), IEEE 1394

Time Code output:

BNC (x 1), 1.0 Vp-p, 75 Ω , unbalanced

Monitor output L/R:

Pin Jack (x 2): -10 dBu at 47 k Ω load,

unbalanced, XLR (male x 2): +4 dBm, 600

Ω load, low impedance, balanced

Headphone output:

JM-60 Stereo Phone Jack, $-\infty$ to -12 dBu at

8 Ω load, unbalanced

Remote Control

RS-422A:

D-sub 9-pin (female) (x 1), Sony 9-pin

remote interface

RS-232C:

D-sub 9-pin (male) (x 1)

Wireless:

SIRCS

SONY

HVR-M10E 190

HVR-M10E HDV VTR

Features

HDV1080i/DVCAM/DV(SP) recording and playback
switchable system *50i/60i (PAL/NTSC) *Down
Conversion playback compatibilities *Built in 16:9
Widescreen LCD Monitor *2-channel Independent Audio
Record Level Control with Audio Meter *Time-Code
Support *Range of inputs/outputs *Status check button
*Visual Indicators (cassette, charge, PAL/NTSC, format,
I-LINK) *External Control *Multi-language operation
*Battery operation *Battery level indicator *Compact and
noiseless design with no cooling fan. *Can be placed
either horizontally or vertically

Supplied Accessories

AC-L15A (AC Adaptor)
Power Cord
RMT-843 (Wireless Remote Controller)
Stand
2x Standard AA (R6) batteries
Cleaning Cassette

Optional Accessories

NP-F970 InfoLITHIUM rechargeable battery pack
NP-F770 InfoLITHIUM rechargeable battery pack
NP-F570 InfoLITHIUM rechargeable battery pack
2NP-F970/B InfoLITHIUM rechargeable battery pack



Specifications

Recording/Playback performance

Recording format:

1080/50i, 1080/60i, 576/50i (PAL),
480/60i (NTSC)

Playout/Down-conversion format:

1080/50i, 1080/60i, 576/50i (PAL),
480/60i (NTSC), 576/50p, 480/60p

Tape speed:

HDV/DV SPMax. 18.812 mm/s
with PHDVM-63DM cassette
DVCAM Max. 28.218 mm/s
with PHDVM-63DM cassette

Playback/Recording time:

HDV/DV SP Max. 63 min with
PHDVM-63DM cassette

Recording time:

DVCAM Max. 41 min with PHDVM-63DM
cassette

Fast forward/Rewind time:

Approx. 2 min 40 s with PHDVM-63DM
cassette

Input/Output connectors/devices

Video input/output:

RCA pin x 2
Video signal: 1 Vp-p, 75 Ω unbalanced,
sync negative

S-video input/output:

Mini-DIN 4-pin x 2
Y: 1 Vp-p, 75 Ω unbalanced, sync negative
C: 0.3 Vp-p (PAL), 0.286 Vp-p (NTSC), 75 Ω
unbalanced

Component video output:

RCA pin x 3
Y: 1 Vp-p (0.3 V, sync negative)
Pr/Pb (Cr/Cb): 700 mVp-p (100%
colour bar), input impedance 75 Ω

i.LINK:

4-pin

Phones:

Stereo minijack (\varnothing 3.5 mm), 8 Ω loading

LANC:

Stereo mini-minijack (\varnothing 2.5 mm)

Audio input:

RCA pin x 2
Input level: max. 4 Vrms, input impedance:
min. 47 k Ω unbalanced

Audio output:

RCA pin x 2
Output level: 2 Vrms (full bit), output
impedance: max. 1 k Ω

LCD monitor:

3.5-inch type, approx. 250,000 pixels
(1120 x 224), hybrid type

General

Mass Approx.:

1.8 kg (3 lb 15 1/2 oz)

Power requirements:

DC 8.4 V (DC IN jack), DC 7.2 V (Battery
jack input)

Power consumption:

HDV 6.5 W (playback mode with LCD
monitor on)
DVCAM/DV5.7 W (playback mode with
LCD monitor on)

Operating temperature:

5 to 40 $^{\circ}$ C (41 to 104 $^{\circ}$ K)

Storage temperature:

-20 to +60 $^{\circ}$ C (-4 to 140 $^{\circ}$ K)

HDVStation	192
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HDVStation High Definition Network Video Production System

Features

HDVStation is video production and library system for DV, DVCAM and HDV users.

The central part of the HDVStation system is HDVStation Server (HDVSTATION-CORE). The server provides central storage for AV files and operates a full content management system.

HDV acquired content is simply ingest and logged into HDVStation by uploading from tape. Up to 25 browse users can then concurrently search for and review library clips. Chosen clips can be then opened in a choice of target non-linear editing tools-such as Sony Vegas, Pinnacle Liquid Edition or Apple Final Cut Pro



Supplied Accessories

- Ingest Client License (1)
- Browse Client License (5)
- Ingest User Manual (1)
- Browse User Manual (1)
- Web Administration User Guide (1)

Optional Accessories

- Ingest terminal
- Additional External Storage
- Additional browsing Clients
- Non-Linear Editing Solutions
- HDVStation Archive
- Backup Solutions
- Payout Solutions

DSR-2000P	194
DSR-1800P	196
DSR-1600P	198
DSR-1500AP	200
DSR-45P	202
DSR-25	203
DSR-11	204
DSR-50P	205

DSR-2000P DVCAM Editing Recorder

Features

*Playback capability of all DV (25 Mb/s) recorded tapes including DV tapes recorded in SP/LP mode and DVCPRO without any mechanical adaptor (SDTI(QSDI) and i.LINK(DV) do not support DVCPRO playback) *Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette *Pread editing capability(*1) to perform A/B roll editing(*2) with two VTRs, audio mix/swap and voice over with no delay between video and audio *Audio cross-fade function * Four-channel audio editing capability *Excellent jog audio quality *VTR-to-VTR editing without external controllers *Wide range of digital slow speed from -1 to +1 times normal speed *DMC (Dynamic Motion Control) *High-speed picture search over a range of 60 times normal speed, in both forward and reverse *Versatile digital interfaces: SDI, SDTI (QSDI), i.LINK (DV)(option), SDTI-CP (MPEG Out)(option) and AES/EBU digital audio *Extensive analog interfaces: composite, component, S-Video and XLR audio *RS-422A remote control interface *Frame accurate editing capability *ClipLink operation *Full tape dubbing with ClipLink Log Data via SDTI (QSDI) and RS-422A interfaces *16:9 aspect ID signal recording *Process control for highly stable video signals *TC and VITC *Channel condition monitoring function *Built-in signal generator * Closed caption function

(*1) Not available through SDTI(QSDI) and i.LINK(DV) interfaces (*2) MIX and WIPE only

Supplied Accessories

RCC-5G 9-pin remote control cable (1)
Operating Instructions (1)
AC Power cord (1)

Optional Accessories

DSBK-190 i.LINK/DV Input/Output Board
RMM-131 Rack Mount Kit
RCC-G Cables 9-pin/9-pin Cable
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)
PDV-N Digital Videocassette Tapes (Non IC type)
PDV-MEM Digital Videocassette Tapes (Master Tape)
PDV-ME Digital Videocassette Tapes
PDV-CL Video Head Cleaning Cassette
Tapes (for DVCAM)



Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

110 W

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Mass:

18 kg (39 lb 10 oz)

Dimensions:

427 (W) × 175 (H) × 496.5 (D) mm

(16 7/8 × 7 × 19 5/8 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time:

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ±60 times normal speed in forward and reverse

Digital slow mode: ±1 times normal speed in forward and reverse

Video Performance

Band width (via analogue component I/O):

Luminance: 25 Hz to 5.5 MHz +1.0/-2.0 dB
5.75 MHz +0/-3.0 dB (Typical measurement)

Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB

S/N ratio (via analogue component I/O):

More than 55 dB

K-factor (K2T, KPB):

Less than 2.0%

Y/C delay:

Less than 30 ns

Audio Performance

Frequency response:

2CH mode (48 kHz/16-bit): 20 Hz to 20

kHz +0.5/-1.0 dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5

kHz +0.5/-1.0 dB

Dynamic range:

More than 90 dB

Distortion (THD + N):

Less than 0.05%

Input Signals

Video (Analog)

REF. Video: BNC (2), loop-through connection

Composite, 1.0 Vp-p, 75 Ω, sync negative

Video: BNC (2), loop-through connection

Composite, 1.0 Vp-p, 75 Ω, sync negative

Component: BNC (3)

Y:1.0 Vp-p, 75 Ω, sync negative

R-Y:0.7 Vp-p, 75 Ω (100%)

B-Y:0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y:1.0 Vp-p, 75 Ω, sync negative

C:0.3 Vp-p, 75 Ω (at burst level)

Video (Digital)

SDI: BNC (2), active-through connection

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1)

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-190 i.LINK/DV Input/Output Board IEEE1394

Audio (Analog)

Audio: XLR 3-pin, female (4)

-6/0/+4 dBu, 600 Ω on/off/-60 dBu, high impedance

Audio (Digital)

AES/EBU: BNC (2), 75 Ω, unbalanced

Time Code:

BNC (1), 0.5 Vp-p to 18 Vp-p, 3 kΩ, unbalanced

Output Signals

Video (Analog)

REF. Vide: BNC (1), 0.3 Vp-p, 75 Ω, sync negative

Video 1/2/3(SUPER): BNC (3)

Composite, 1.0 Vp-p, 75 Ω, sync negative

Component: BNC (3)

Y:1.0 Vp-p, 75 Ω, sync negative

R-Y:0.7 Vp-p, 75 Ω (100%)

B-Y:0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y:1.0 Vp-p, 75 Ω, sync negative

C:0.3 Vp-p, 75 Ω (at burst level)

Video (Digital)

SDI: BNC (3)

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1)

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-190 i.LINK/DV Input/Output Board IEEE1394

Audio (Analog)

Audio: XLR 3-pin, male (4)

+4/0/-6 dBu (selectable by menu)

Monitor: RCA (1)

-11 dBu, 47 kΩ, unbalanced (-18 dBFS)

Headphone:JM-60 headphone jack (1)

-∞ to -13 dBu, 8 Ω, unbalanced (-18 dBFS)

Audio (Digital)

AES/EBU: BNC (2), 75 Ω, unbalanced

Time Code

BNC: (1), 2.2 Vp-p, 75 Ω, unbalanced

Remote

RS-422A: D-sub 9-pin, female (2)

Video Control: D-sub 15-pin, male (1)

Control Panel: D-sub 15-pin, female (1)

DSR-1800P DVCAM Editing Recorder

Features

*Superb picture quality of the DVCAM format *Playback capability of DV (25 Mb/s) recorded tapes including DV tapes recorded in SP mode and DVCPRO tapes without a mechanical adaptor(SDTI (QSDI) and i.LINK (DV) interfaces do not support DVCPRO playback.) *Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette *Preread playback capability to perform audio mix/swap and over dubbing without any delay between video and audio signals *Four-channel audio editing capability *Audio cross-fade function *Excellent jog audio capability *DMC (Dynamic Motion Control) *Digital slow speed from -0.5 to +0.5 times normal speed *High-speed picture search over a range of 60 times normal speed, in both forward and reverse *Versatile digital interfaces (The optional boards are required): SDI , SDTI(QSDI) , i.LINK (DV) and AES/EBU digital audio. *Extensive analog interfaces: composite, component, S-Video and XLR audio *RS-422A remote control interface *Frame accurate editing capability *ClipLink operation *Full tape dubbing with ClipLink Log Data *16:9 aspect ID signal recording *Video process control of analog and digital outputs *TC and V ITC *Channel condition monitoring function *Built-in signal generator *Flexible input selection between video and audio(*) *Universal powering system (AC 100 V to 240 V) *Three-size cassette compartment to ensure compatibility with DV(25Mb/s) recorded tapes of all size and types *Closed caption function

(*) i.LINK cannot be combined with other signal interfaces.



Supplied Accessories

AC Power cord (1)
Operating instructions (1)

Optional Accessories

DSBK-1801 SDI, AES/EBU Input/Output Board
DSBK-1803 i.LINK/DV Input/Output Board
RMM-131 Rack Mount Kit
RCC-G Cables 9-pin/9-pin Cable
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)
PDV-CL Video Head Cleaning Cassette
Tapes (for DVCAM)
PDV-MEM Digital Videocassette Tapes (Master Tape)
PDV-N Digital Videocassette Tapes (Non IC type)
PDV-ME Digital Videocassette Tapes

Specifications

GENERAL

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

100 W (with all options)

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Weight:

13 kg (28 lb 10 oz)

Dimensions (W x H x D):

427 x 174 x 400 mm (16 7/8 x 6 7/8 x

15 3/4 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ± 60 times normal speed

Digital slow mode: ± 0.5 times normal speed

VIDEO PERFORMANCE

Bandwidth (via analog component I/O)

Luminance: 25 Hz to 5.0 MHz ± 1.0 dB

Chrominance: 25 Hz to 2.0 MHz ± 1.0 -2.0 dB

S/N ratio (via analog component I/O):

More than 55 dB

K-factor (K2T, KPb):

Less than 2%

Y/C delay:

Less than 30 ns

AUDIO PERFORMANCE

Frequency response

2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz ± 0.5 -1.0 dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz ± 0.5 -1.0 dB

Dynamic range:

More than 90 dB

Distortion (THD + N):

Less than 0.05%

INPUT SIGNALS

VIDEO (ANALOG)

REF. Video :BNC (2), loop-through connection

0.3 Vp-p, 75 Ω , sync negative

Composite Video: BNC (2), loop-through connection

1.0 Vp-p, 75 Ω , sync negative

Component :BNC (3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2), active-through connection

*using optional DSBK-1801

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (OSDI): BNC (1) *using optional

DSBK-1802

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-1803

IEEE 1394

AUDIO (ANALOG)

Audio: XLR 3-pin, female (4)

-6/-3/0/+4 dBu (selectable by menu)

-60 dBu (high impedance)/600 Ω

OFF/ON

AUDIO (DIGITAL)

AES/EBU :BNC (2) *using optional

DSBK-1801

75 Ω , unbalanced

TIME CODE

BNC (1): 0.5 Vp-p to 18 Vp-p, 3 k Ω unbalanced

OUTPUT SIGNALS

VIDEO (ANALOG)

REF. Video: BNC (1)

0.3 Vp-p, 75 Ω , sync negative

Video 1/2(SUPER): BNC (2)

Composite, 1.0 Vp-p, 75 Ω , sync negative

Component :BNC (3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2) *using optional DSBK-1801
Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (OSDI) :BNC (1) *using optional

DSBK-1802

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-1803

IEEE 1394

AUDIO (ANALOG)

Audio : XLR 3-pin,male (4)

-6/-3/0/+4 dBu (selectable by menu)

Monitor: RCA (1)

-9 dBu, 47 k Ω , unbalanced (-18 dBFS)

Headphone: JM-60 headphone jack (1)

∞ to -11 dBu, 8 Ω , unbalanced (-18 dBFS)

AUDIO (DIGITAL)

AES/EBU: BNC (2) *using optional

DSBK-1801

75 Ω , unbalanced

TIME CODE

BNC(1), 2.2 Vp-p, 75 Ω , unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (1)

Video Control: D-sub 15-pin, male (1)

CONTROL S (SIRCS): Stereo mini jack (1)

DSR-1600P DVCAM Editing Player

Features

*Superb picture quality of the DVCAM format *Playback capability of DV (25 Mb/s) recorded tapes including DV tapes recorded in SP mode and DVCPRO tapes without a mechanical adaptor (SDTI (QSDI) and i.LINK (DV) interfaces do not support DVCPRO playback) *Excellent jog audio capability *DMC (Dynamic Motion Control) *Wide range of digital slow speed from -0.5 to +0.5 times normal speed *High-speed picture search over a range of 60 times normal speed, in both forward and reverse *Versatile digital interfaces(The optional boards are required) : SDI , SDTI(QSDI) , i.LINK(DV) and AES/EBU digital audio . *Extensive analog interfaces: composite, component, S-Video and XLR audio *RS-422A remote control interface *Frame accurate editing capability *ClipLink operation *Video process control for greater control of both analog and digital outputs *TC and VITC*Channel condition monitoring function *Universal powering system (AC 100 V to 240 V) *Three-size cassette compartment to ensure compatibility with DV(25Mb/s) recorded tapes of all size and types *Closed caption function *Jog dial on front panel

Supplied Accessories

AC power cord (1)
Operating instructions (1)

Optional Accessories

DSBK-1803 i.LINK/DV Input/Output Board
DSBK-1601 SDI, AES/EBU Output Board
RMM-131 Rack Mount Kit
RCC-G Cables 9-pin/9-pin Cable
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)
PDV-N Digital Videocassette Tapes (Non IC type)
PDV-MEM Digital Videocassette Tapes (Master Tape)
PDV-ME Digital Videocassette Tapes
PDV-CL Video Head Cleaning Cassette Tapes (for DVCAM)



Specifications

GENERAL

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

70 W (with all options)

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Weight:

13 kg (28 lb 10 oz)

Dimensions (W x H x D):

427 x 174 x 400 mm (16 7/8 x 6 7/8 x 15 3/4 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ± 60 times normal speed

Digital slow mode: ± 0.5 times normal speed

VIDEO PERFORMANCE

Bandwidth (via analog component I/O)

Luminance: 25 Hz to 5.0 MHz ± 1.0 dB

Chrominance: 25 Hz to 2.0 MHz $+1.0/-2.0$ dB

S/N ratio (via analog component I/O):

More than 55 dB

K-factor (K2T, KPB):

Less than 2%

Y/C delay:

Less than 30 ns

AUDIO PERFORMANCE

Frequency response

2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz $+0.5/-1.0$ dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz $+0.5/-1.0$ dB

Dynamic range:

More than 90 dB

Distortion (THD + N):

Less than 0.05%

INPUT SIGNALS

VIDEO (ANALOG)

REF. Video: BNC (2), loop-through connection

0.3 Vp-p, 75 Ω , sync negative

OUTPUT SIGNALS

VIDEO (ANALOG)

REF. Video: BNC (1)

0.3 Vp-p, 75 Ω , sync negative

Composite Video 1/2(SUPER): BNC (2)

1.0 Vp-p, 75 Ω , sync negative

Component: BNC (3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI :BNC(2) *using optional DSBK-1601

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1) *using optional

DSBK-1602

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-1803

IEEE 1394

AUDIO (ANALOG)

Audio: XLR 3-pin, male (4)

-6/-3/0/+4 dBu (selectable by menu)

Monitor: RCA (1)

-9 dBu, 47 k Ω , unbalanced (-18 dBFS)

Headphone: JM-60 headphone jack (1)

$-\infty$ to -11 dBu, 8 Ω , unbalanced (-18 dBFS)

AUDIO (DIGITAL)

AES/EBU: BNC(2) *using optional

DSBK-1601

75 Ω , unbalanced

TIME CODE:

BNC (1): 2.2 Vp-p, 75 Ω , unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (1)

Video Control: D-sub 15-pin, male (1)

CONTROL S (SIRCS): Stereo mini jack (1)

DSR-1500AP DVCAM Editing Recorder

Features

*Compact, half-rack size *Superb picture quality of the DVCAM format *Playback compatibility with DV (25 Mb/s) family formats including consumer DV (SP mode) and DVCPRO without a mechanical adaptor(*) *DV format recording capability (SP mode, 10- μ m track pitch recording) (**) *Long recording time: max. 184 min (DVCAM mode)/276 min (DV SP mode) with a standard-size cassette, and max. 40 min (DVCAM mode)/60 min (DV SP mode) with a mini cassette *Versatile digital interfaces: equipped with i.LINK (DV), and optional SDI, SDTI (QSDI) and AES/EBU interfaces *Extensive range of analog interfaces: composite, component, S-video and two channels of XLR audio *Variable speed playback within the range of -0.5 to +0.5 times normal play speed *High-speed color picture search: 60 times normal play speed in both forward and reverse *Menu keys on front panel for frame by frame picture search *RS-422A remote control interface *Excellent jog audio quality *ClipLink operation *Full tape dubbing including ClipLink Log Data using SDTI (QSDI) and RS-422A interfaces *16:9 aspect ID signal recording *Video process control for both analog and digital outputs *TC and VITC *Built-in signal generator *Universal powering system: allows the use of AC100 V to 240 V power sources *Three-size cassette compartment to ensure compatibility with DV(25Mb/s) recorded tapes of all size and types *Closed caption function

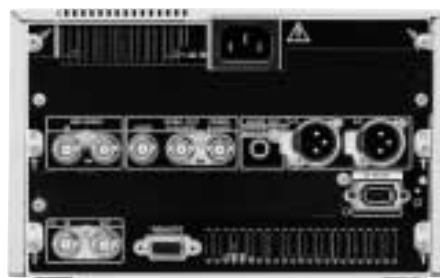
(*) SDTI (QSDI) interface does not support DVCPRO playback. (**) Assemble or insert editing is not possible.

Supplied Accessories

AC Power cord (1)
Operating instructions (1)

Optional Accessories

DSBK-1501 Digital Input/Output Board
DSBK-1504P Analog Input Board
DSRM-10 Remote Control Unit
RCC-G Cables 9-pin/9-pin Cable
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)
PDV-MEM Digital Videocassette Tapes
(Master Tape)
PDV-N Digital Videocassette Tapes (Non IC type)
PDV-CL Video Head Cleaning Cassette
Tapes (for DVCAM)
PDV-ME Digital Videocassette Tapes



Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

55 W (with all options)

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Mass:

6 kg (13 lb 3 oz)

Dimensions (W x H x D):

210 x 130 x 420 mm (8 3/8 x 5 1/8 x 16 5/8 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

DVCAM mode:

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

DV (SP) mode:

Standard size: 276 min. with

PDV-184ME/184N/184MEM

Mini size: 60 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ± 60 times normal speed

Digital slow mode: ± 0.5 times normal speed

Video Performance

Bandwidth (via analog component I/O)

Luminance: 25 Hz to 5.0 MHz +1.0/-1.5 dB

Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB

S/N ratio (via analog component I/O):

More than 55 dB

K-factor (K2T, KPB):

Less than 2%

Y/C delay:

Less than 30 ns

Audio Performance

Frequency response

2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz

± 1.0 dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz

± 1.0 dB

Dynamic range:

More than 87 dB

Distortion (THD + N):

Less than 0.07%

Input Signals

VIDEO (ANALOG)

REF. Video: BNC (2), loop-through connection

0.3 Vp-p, 75 Ω sync negative

Composite Video: BNC (2), loop-through

connection(*1) *Using optional DSBK-1504

1.0 Vp-p, 75 Ω , sync negative

Component: BNC (3) (*1) *Using optional

DSBK-1504

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: BNC (2) (*1) *Using optional

DSBK-1504

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (1) (*2) *Using optional DSBK-1501

Conforms to Serial Digital Interface

(270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1) (*2) *using optional

DSBK-1501

Conforms to SDTI (270 Mb/s), SMPTE

305M/322M

i.LINK (DV): 6-pin (1)

IEEE 1394-based

AUDIO (ANALOG)

Audio: XLR 3-pin female (2) *Using optional

DSBK-1504

-6/-3/0/+4 dBu (selectable by menu), high

impedance

AUDIO (DIGITAL)

AES/EBU: BNC (2) *Using optional DSBK-1501

75 Ω , unbalanced

Time Code

BNC (1), 0.5 Vp-p to 18.0 Vp-p, 3 k Ω

unbalanced

Output Signals

VIDEO (ANALOG)

Video 1/2/3(SUPER): BNC (3) (*3)

Composite, 1.0 Vp-p, 75 Ω , sync negative

Component: BNC (3) (*3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: BNC (2) (*3)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2) (*4) *Using optional DSBK-1501

Conforms to Serial Digital Interface

(270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (2) (*4) *Using optional

DSBK-1501

Conforms to SDTI (270 Mb/s), SMPTE

305M/322M

i.LINK (DV): 6-pin (1)

IEEE 1394-based

AUDIO (ANALOG)

Audio: XLR 3-pin male (2)

-6/-3/0/+4 dBu (selectable by menu)

Monitor: RCA (1) (*5)

- ∞ to -9 dBu, 47k Ω , unbalanced

(-18 dBFS)

Headphone: JM-60 headphone jack (1)

- ∞ to -11 dBu, 8 Ω , unbalanced (-18 dBFS)

AUDIO (DIGITAL):

BNC (2), AES/EBU, 75 Ω , unbalanced *Using

optional DSBK-1501

TIME CODE:

BNC (1), 2.2 Vp-p, 75 Ω , unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (1)

Control-S (SIRCS): Stereo mini jack (1)

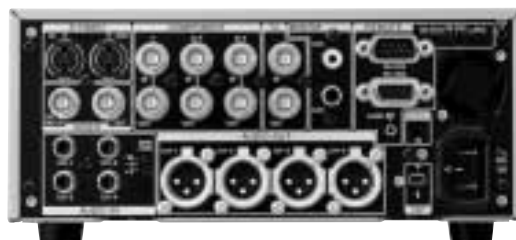
(*1): Video, Component and S-Video inputs share the same BNC connectors. (*2): SDI and SDTI (QSDI) inputs share the same BNC connectors. (*3): Video, Component and S-Video outputs share the same BNC connectors. (*4): SDI and SDTI (QSDI) outputs share the same BNC connectors. (*5): The volume of monitor can be controlled by the PHONE LEVEL control knob.

DSR-45P DVCAM Recorder

Features

*Superb picture quality of the DVCAM format *Recording and playback capability of the DV format (SP mode only)(*1) *Long recording time: up to 184 minutes with a standard-size cassette, 40 minutes with a mini-size cassette in DVCAM mode *Full range of analog Video IN/OUT: component, composite, S-video *Four channel independent Audio In/OUT with XLR connectors for Audio OUT *i.LINK(DV) interface for simultaneous transfer of audio, video, and command signals *RS-422A remote control interface(*2) *RS-232C interface for basic control from a PC *LANC and Control S interface *Time code IN/OUT *Time code/User bit preset *Time code IN through DV IN *Duplication function (Including the duplication of cassette memory data) *Compact size (half-rack size width, 2U height) *Low power consumption (22 W during playback) *Built-in 2-inch type (123,200 dot) color LCD monitor *Tape counter *Wireless remote controller RMT-DS5 supplied

(*1) When recording in DV(SP) format, the transition between cut to cut may not be smooth. In addition, when the recording format is switched between DVCAM and DV, the transition may not be recorded smoothly. (*2) The DSR-45/45P is not equipped with the synchronization capability, therefore, is recommended to be used only as a source feeder in A/B roll editing.



Supplied Accessories

Cleaning cassette (1)
RMT-DS5 wireless remote controller (1)
Size AA (R6) battery for remote controller (2)
Operating instructions (1)
Interface manual for programmers (RS-232C) (1)
AC power cord (1)

Optional Accessories

VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
DSRM-20 Remote Control Unit

Specifications

General

System
PAL
Power requirements:
AC 100 V to 240 V, 50/60 Hz
Power consumption:
22 W
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to 60 °C (-4 °F to 140 °F)
Mass:
Approx. 4.6 kg (10 lb 2 oz)
Dimensions:
212 (W) x 98 (H) x 392.8 (D) mm
(8 3/8 x 3 7/8 x 15 1/2 inches)
Tape speed
DVCAM mode: 28.2 mm/s
DV SP playback mode: 18.8 mm/s
Recording/Playback time in DVCAM mode:
Standard size: 184 min. with
PDV-184ME/184N/184MEM
Mini size: 40 min. with
PDVM-40ME/40N/40MEM

Tape rewind time:

Less than 2 min. with
PDV-184ME/184N/184MEM
Search speed (via DSRM-20 or RMT-DS5):
± x1/10, x1/3, x1, x2, x11, x17 (DVCAM)
± x1/10, x1/3, x1, x2, x11, x24 (DV SP)

Signal Inputs

Video (Analog)
Ref.Video: BNC (1)
Black burst: 75 Ω, sync negative
Composite: BNC (1)(*1)
1.0 Vp-p, 75 Ω, unbalanced, sync negative
S-Video: Mini DIN 4-pin (1)
Y: 1.0 Vp-p, 75 Ω, sync negative
C: 0.3 Vp-p (subcarrier), 75 Ω
Component: BNC (3)
Y: 1.0 Vp-p, 75 Ω, sync negative
R-Y/B-Y: 0.7 Vp-p, 75 Ω (with 100% color bar)
Audio (Analog)
Audio: Pin jack (4)
-10/-2/+4 dBu (full bits -18 dB)

Signal outputs

Video (Analog)
Composite: BNC (1)
1.0 Vp-p, 75 Ω, unbalanced, sync negative
S-Video: Mini DIN 4-pin (1)
Y: 1.0 Vp-p, 75 Ω, unbalanced, sync negative
C: 0.3 Vp-p (subcarrier), 75 Ω, unbalanced
Component: BNC (3)
Y: 1.0 Vp-p, 75 Ω, sync negative
R-Y/B-Y: 0.7 Vp-p (with 100% color bar)
Monitor: Pin jack (1)
Composite, 1.0 Vp-p, 75 Ω, sync negative
Audio (Analog)
Audio: XLR 3-pin male (4)
+4 dBu (full bits -20dB)(*2)

Monitor: Pin jack (1)

2 Vrms (maximum)

Digital Input/Output

i.LINK (DV): 4-pin (1), IEEE1394

Others

RS-422A: D-sub 9-pin, female (1)
RS-232C: D-sub 9-pin, male (1)
LANC: Stereo mini-mini jack (1)
Control S (SIRCS) IN: Stereo mini jack (1)
Headphone: Stereo mini jack (1)

(*1) Shared with REF IN (*2) The audio output level of the DSR-45 will be reduced by half when connected to an Unbalanced XLR input device.

DSR-25 DVCAM Recorder

Features

*Superb picture quality of the DVCAM format *Recording and playback capability of DV recorded tapes (SP mode only)(*1) *Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette in DVCAM mode *Recording and playback capability of both NTSC/PAL signals(*2) *i.LINK (DV) interface for simultaneous transfer of audio, video, and command signals *LANC and control S interface *Time code/ User bit preset *Time code IN through DV IN *Duplication function (Including the duplication of cassette memory data) *Power-on recording and playback capabilities *Compact size (half-rack size width, 2U height) *Low power consumption (16 W during playback) *Built-in 2-inch type (123,200 dot) color LCD monitor *Tape counter *Wireless remote controller RMT-DS5 supplied

(*1) When recording in DV (SP) format, the transition between cut to cut may not be smooth. In addition, when the recording format is switched between DVCAM and DV, the transition may not be recorded smoothly. (*2) The DSR-25 is not equipped to convert signals from NTSC to PAL, or vice versa.



Supplied Accessories

Cleaning cassette (1)
RMT-DS5 wireless remote controller (1)
Size AA (R6) battery for remote controller (2)
Operating instructions (1)
AC power cord (1)

Optional Accessories

VMC-IL44 cables 4-pin <-> 4-pin i.LINK
Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK
Cable
DSRM-20 Remote Control Unit

Specifications

General

Video signal standard:
NTSC/PAL Switchable
Power requirements:
AC 100 V to 240 V, 50/60 Hz
Power consumption:
16 W
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to 60 °C (-4 °F to 140 °F)
Mass:
Approx. 4.3 kg (9 lb 8 oz)
Dimensions:
212 (W) x 98 (H) x 392.8 (D) mm
(8 3/8 x 3 7/8 x 15 1/2 inches)
(Including external projections)
Tape speed:
DVCAM mode: 28.2 mm/s
DV SP playback mode: 18.8 mm/s
Recording/Playback time in DVCAM mode:
Standard size: 184 min. with
PDV-184ME/184N/184MEM
Mini size: 40 min. with
PDVM-40ME/40N/40MEM
Tape rewind time:
Less than 2 min. with
PDV-184ME/184N/184MEM

Search speed (via RMT-DS5 or DSRM-20):

± x 1/10, x 1/3, x 1, x 2, x 9, x 14 (DVCAM
NTSC)
± x1/10, x1/3, x1,x2,x9, x24 (DV SP NTSC)
± x1/10, x1/3, x1,x2,x11, x17 (DVCAM
PAL)
± x1/10, x1/3, x1,x2,x11, x24 (DV SP PAL)

Signal Inputs

Video (ANALOG)

Composite VIDEO: BNC (1)
1.0 Vp-p, 75 Ω, sync negative
S-Video: Mini DIN 4-pin (1)
Y: 1.0 Vp-p, 75 Ω, sync negative
C: 0.286 Vp-p (NTSC mode)
(subcarrier), 75 Ω
C: 0.3 Vp-p (PAL mode) (subcarrier),
75 Ω

Video (DIGITAL)

i.LINK(DV): 4-pin (1), IEEE1394

Audio (ANALOG)

Pin jack (L/R) (1): -10/-2/+4 dBu (full bits
-20dB)

Signal outputs

Video (ANALOG)

Composite VIDEO: BNC (1)
1.0 Vp-p, 75 Ω, sync negative
S-Video: Mini DIN 4-pin (1)
Y: 1.0 Vp-p, 75 Ω, sync negative
C: 0.286 Vp-p (NTSC mode)
(subcarrier), 75 Ω
C:0.3 Vp-p (PAL mode) (subcarrier),
75 Ω

Video (DIGITAL)

i.LINK (DV): 4-pin (1), IEEE1394

Audio (ANALOG)

Pin jack (L/R) (1), 2 Vrms (full bits)

OTHERS

LANC: Stereo mini-mini jack (1)
Control S (SIRCS) In: Stereo mini jack (1)
Headphone jack: Stereo mini jack (1)

DSR-11 DVCAM Recorder

Features

*Superb picture quality of the DVCAM format *Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette
 *Recording and playback of DV format tapes (SP mode only) *NTSC/PAL compatible*1 *Composite and S Video inputs *i.LINK (DV) interface providing a single cable connection to simultaneously transfer audio, video and command signals *Unique design enables both horizontal and vertical installation *LANC and Control S terminals
 *Auto repeat function *DC power operation *Supplied RMT-DS11 Wireless Remote Commander

*1 The DSR-11 does not convert signals from NTSC to PAL, or vice versa.



Supplied Accessories

AC Adaptor (1)
 Power Cord (1)
 RMT-DS11 Wireless Remote Commander (1)
 Size AA(R6) Batteries for Remote (2)
 Stand (1)
 Cleaning Cassette (1)
 Operation Manual (1)

Optional Accessories

DSRM-10 Remote Control Unit
 DSRM-20 Remote Control Unit
 CCFD-L Cables DV Cables (6-pin to 4-pin)
 VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable
 VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

Specifications

General

System:
 NTSC/PAL switchable
 DC input:
 DC jack type 4 x 1 (12 V)
 Power consumption:
 15 W
 Operating temperature:
 5 to 40 °C (41 to 104 °F)
 Storage temperature:
 -20 to 60 °C (-4 to 140 °F)
 Tape speed:
 28.221 mm/s (DVCAM mode), 18.831 mm/s (DV SP mode)
 Recording/Playback time:
 184 minutes (DVCAM mode),
 270 minutes (DV SP mode) with PDV-184ME cassette
 40 minutes (DVCAM mode),
 60 minutes (DV SP mode) with PDVM-40ME cassette
 Mass Dimensions Video:
 2.8 kg (6 lb 2 oz)
 180 (W) x 69 (H) x 258.4 (D) mm
 (7 1/8 x 2 3/4 x 10 1/4 inches), excluding projections

Video

Rec Mode:
 DVCAM/DV (SP mode only)
 PB Mode:
 DVCAM/DV (SP mode only)

Audio

Rec Mode:
 48 kHz: 16 bit: 2ch/32 kHz:12 bit:
 4ch/automatic (DV IN)
 PB Mode:
 48 kHz: 16 bit: 2ch/32 kHz:12 bit: 4ch/32
 kHz:16 bit: 2ch
 44.1kHz:16 bit: 2ch (automatically selected)

Input/Output connectors

Video IN

Composite: RCA pin
 1.0 Vp-p, 75 Ω , Sync negative
 S Video: 4-pin mini DIN
 Y: 1.0 Vp-p, 75 Ω , Sync negative
 C: 0.286 Vp-p (NTSC) 0.3 Vp-p (PAL)
 (subcarrier burst), 75 Ω

Audio IN:

RCA pin x 2 (L, R)
 Input level: 2 V rms (full bit) Input
 impedance: more than 47 k Ω

Video OUT

Composite:RCA pin
 1.0 Vp-p, 75 Ω , Sync negative
 S Video: 4-pin mini DIN
 Y: 1.0 Vp-p, 75 Ω , Sync negative
 C: 0.286 Vp-p (NTSC) 0.3 Vp-p (PAL)
 (subcarrier burst), 75 Ω

Audio OUT:

RCA pin x 2 (L, R)
 Output level: 2 V rms (full bit) Output
 impedance: less than 10 k Ω

DV IN/OUT:

4-pin

Control S:

Stereo mini jack

LANC:

Stereo minimini jack

DSR-50P DVCAM Portable Recorder

Features

*Superb picture quality of the DVCAM format *Playback and Recording capability of DV recorded tapes (SP mode only) *Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette *Four-channel independent digital audio recording *2.5-inch (200,000 dot) color LCD monitor *Duplication options (tape copy, tape copy with original time code, or tape copy with cassette memory data) *Compact & lightweight design: 3.9 kg (8 lb 9 oz) without battery and tape *Playback capability of both NTSC and PAL recorded tapes(*) *i.LINK (DV) interface providing a single cable connection to simultaneously transfer audio, video and command signals *26-pin Camera Connector *Analog Component Output *Timecode IN/OUT

(*) The output signal level is not standard and therefore recommended for simple monitoring only, with a monitor of the same color system as the original source.



Supplied Accessories

LCD Protection Cover (1)
Cleaning Cassette (1)

Optional Accessories

BC-M150 Ni-NH & Li-ion Battery Charger
BC-M50 Ni-NH & Li-ion Battery Charger
BC-L60S Rechargeable Lithium-ion Battery Pack
DSRM-10 Remote Control Unit
DSRM-20 Remote Control Unit
FS-20 Foot switch
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)

Specifications

General

DC Input
XLR 4-pin (male), +12 V
Power consumption
15 W
Operating temperature
5 to 40 °C (41 to 104 °F)
Storage temperature
-20 to 60 °C (-4 to 140 °F)
Tape speed
Approx. 28.2 mm/sec (DVCAM mode),
Approx. 18.8 mm/sec (DV SP mode)
Recording/Playback time
184 minutes (DVCAM mode), 270 minutes
(DV SP mode) with PDV-184ME cassette
40 minutes (DVCAM mode), 60 minutes
(DV SP mode) with PDVM-40ME cassette
Mass
3.9 kg (8 lb 9 oz), excluding battery and tape
Dimensions
247 (W) x 92.5 (H) x 311 (D) mm (9 3/4 x 3 3/4 x 12 1/4 inches), excluding projections
279 (W) x 99 (H) x 315 (D) mm (11 x 4 x 12 1/2 inches), including projections

Video Performance

Rec mode
DVCAM/DV (SP mode only)
PB mode
DVCAM/DV (SP mode only)

Audio Performance

Rec mode
48.0 kHz: 16 bit: 2ch / 32.0 kHz: 12 bit:
4ch / automatic (DV IN)
PB mode
48.0 kHz: 16 bit: 2ch / 32.0 kHz: 12 bit:
4ch /
32.0 kHz: 16 bit: 2ch / 44.1 kHz: 16 bit:
2ch (automatically selected)

Input terminals

Video (Analog)
Reference: BNC (1), Black Burst 75 Ω,
Sync negative (use Video IN)
Composite Video: BNC (1), 1.0 Vp-p, 75 Ω,
Sync negative
S-Video: 4-pin mini DIN (1)
Y: 1.0 Vp-p, 75 Ω, Sync negative
C: 0.3 Vp-p (subcarrier burst) 75 Ω
Audio IN (Analog)
Audio: XLR 3-pin, female (4)
(+4 dBu/-20 dBu/-60 dBu), impedance
more than 3 kΩ
with +48 V phantom power supply
(independently switched for each
channel)

Camera IN:

26-pin camera connector (1)
Composite: 1.0 Vp-p, 75 Ω, Sync
negative
Component
Y: 1.0 Vp-p, 75 Ω, Sync negative
B-Y: 0.7 Vp-p, 75 Ω, R-Y: 0.7 Vp-p, 75 Ω

DV:

6-pin (with lock) *shared with DV OUT
connector
Timecode:
BNC (1), 0.5 to 18 Vp-p

Output terminals

Video (Analog)
Video OUT 1 (Monitor): Composite, BNC
(1)
1.0 Vp-p, 75 Ω, Sync negative
Superimpose On/Off
Video OUT 2: Composite, BNC (1)
1.0 Vp-p, 75 Ω, Sync negative
S-Video, 4-pin mini DIN (1)
Y: 1.0 Vp-p, 75 Ω, Sync negative
C: 0.3 Vp-p (subcarrier burst) 75 Ω

Component OUT: BNC (3)

Y: 1.0 Vp-p, 75 Ω, Sync negative
B-Y/R-Y: 0.7 Vp-p, 75 Ω

Audio (Analog)

RCA pin: (4), -10 dBu, Standard output
level -18 dB from full bit
RCA pin (Monitor): (1)

DV:

6-pin (with lock) *shared with DV IN
connector

Timecode:

BNC (1), 2.2 Vp-p, 600 ohms / 1.2 Vp-p,
75 Ω

Remote

Control S: Stereo mini jack (1)
Remote: Stereo mini jack (1) (Edge High /
Edge Low / Level High / Level Low) (Tally)
Control: Stereo minimini jack (compatible
with LANC as a player)
Headphone jack (left side): Stereo
standard jack (1)
-19 dBu, with Level Control

Other

Color LCD monitor:
2.5 inch, 200,000 dots

SONY

DVStation	208
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DVStation Networked Video Production System

Features

DVStation is video production and library system for DV and DVCAM users.

The central part of the DVStation system is DVStation Server (DVSTATION-CORE). The server provides central storage for AV files and operates a full content management system.

DV25 based content is simply ingest and logged into DVStation from either a tape or XDCAM upload. Up to 25 browse users can then concurrently search for and review library clips. Chosen clips can be then opened in a choice of target non-linear editing tools-such as Sony Vegas, Pinnacle Liquid Edition or Apple Final Cut Pro



Supplied Accessories

- Ingest Client License (1)
- Browse Client License (5)
- Ingest User Manual (1)
- Browse User Manual (1)
- Web Administration User Guide (1)

Optional Accessories

- Ingest terminal
- Additional External Storage
- Additional browsing Clients
- Non-Linear Editing Solutions
- DVStation Archive
- Backup Solutions
- Playout Solutions

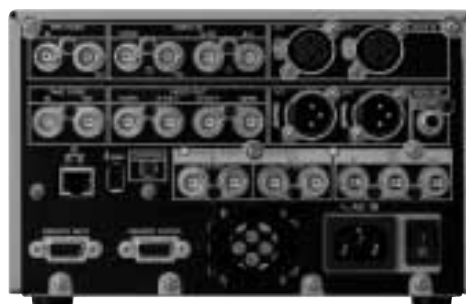
Disc Recorders

DSR-DR1000P 210

DSR-DR1000P Video Disc Recorder

Features

*Hard disc recorder with 3.5-inch large-capacity hard drive
 *Up to six hours of 25 Mb/s DVCAM/DV video and audio recording
 *Compact and lightweight (210 x 130 x 422 mm/ 8 3/8 x 5 1/8 x 16 5/8 inches, 7.5 kg/ 16 lb 10 oz)
 *Simultaneous recording and playback capability
 *Variable speed playback within a wide range of -2 to +2 times normal speed
 *Smooth jog sound capability for easy designation of editing points.
 *Clip segment playback for continuous playback of designated video segments
 *Continuous loop recording allows recording to continue until stopped by operator
 *Interval recording to produce recordings over extended periods
 *Pre-alarm recording automatically triggers recording to start when an external alarm signal is detected
 *VTR-like control panel with Jog/Shuttle dial
 *Random access to files
 *Synchronous playback via RS-422A
 *Versatile interfaces *i.LINK interface (6-pin) with AV/C and SBP2 protocols
 *High-speed file transfer via i.LINK interface using SBP2 protocol
 *File transfer of DV video and audio using FTP



Supplied Accessories

AC power cord (1)
 RM-LG2 (remote control unit) (1)
 Operation manual (1)
 Warranty card (1)

Optional Accessories

RCC-G Cables 9-pin/9-pin Cable
 CCF-L Cables DV Cables (6-pin to 6-pin)
 CCFD-L Cables DV Cables (6-pin to 4-pin)

Specifications

General

Power requirements:
 AC 100 V to 240 V, 50/60 Hz
 Power consumption:
 60 W
 Operating temperature:
 5 °C to 40 °C (41 °F to 104 °F)
 Storage temperature:
 -20 °C to 60 °C (-4 °F to 140 °F)
 Operating humidity:
 Less than 80%
 Storage humidity:
 Less than 90%
 Mass:
 7.5 kg (16 lb 10 oz)
 Dimensions (W x H x D):
 210 x 130 x 422 mm (8 3/8 x 5 1/8 x 16 5/8 inches, without projection)

Video Performance

Bandwidth (via analog component I/O)
 Luminance: 25 Hz to 5.0 MHz +1.0
 Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB
 S/N ratio (via analog component I/O):
 More than 54 dB
 K-factor (K2T, KPB):
 Less than 2%
 Y/C delay:
 Less than 30 ns

Audio Performance

Frequency response
 2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz
 ±1.0 dB
 4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz
 ±1.0 dB
 Dynamic range:
 More than 87 dB
 Distortion (THD + N):
 Less than 0.07% (48 kHz)

Input Signals

VIDEO (ANALOG)
 REF. Video: BNC (2)
 0.3 Vp-p, 75 Ω sync negative
 Composite Video: BNC (2), loop-through connection (*1)
 1.0 Vp-p, 75 Ω, sync negative
 Component: BNC (3) (*1)
 Y: 1.0 Vp-p, 75 Ω, sync negative
 R-Y, B-Y: 0.7 Vp-p, 75 Ω (100% color bar)
 S-Video: BNC (2) (*1)
 Y: 1.0 Vp-p, 75 Ω, sync negative
 C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (1)
 Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656
 i.LINK (DV): 6-pin (1)
 IEEE 1394-based

AUDIO (ANALOG)

Audio: XLR 3-pin female (2)
 -6/-3/0/+4 dBu (selectable by menu), high impedance

AUDIO (DIGITAL)

AES/EBU: BNC (2)
 75 Ω, unbalanced

Time Code

BNC (1), 0.5 Vp-p to 18.0 Vp-p, 3 kΩ unbalanced

Output Signals

VIDEO (ANALOG)

Video 1/2 (SUPER): BNC (2) (*2)
 Composite, 1.0 Vp-p, 75 Ω, sync negative
 Component: BNC (3) (*2)
 Y: 1.0 Vp-p, 75 Ω, sync negative
 R-Y, B-Y: 0.7 Vp-p, 75 Ω (100% color bar)
 S-Video: BNC (2) (*2)
 Y: 1.0 Vp-p, 75 Ω, sync negative
 C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2)
 Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656
 i.LINK (DV): 6-pin (1)
 IEEE 1394-based
 AUDIO (ANALOG)
 Audio: XLR 3-pin male (2)
 -6/-3/0/+4 dBu (selectable by menu)
 Monitor: RCA (1)
 -9 dBu, 47 kΩ, unbalanced (-18 dBFS), volume center
 Headphone: JM-60 headphone jack (1)
 -∞ to -11 dBu, 8 Ω, unbalanced (-18 dBFS)

AUDIO (DIGITAL):

AES/EBU: BNC (2), 75 Ω, unbalanced

TIME CODE:

BNC (1), 2.2 Vp-p, 600 Ω, unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (2)

Control: Mini jack (1)

Network

Ethernet (1): 10Base-T/100Base-TX Ethernet, RJ-45 modular jack

S

(*1) Composite, Component and S-Video inputs share the same BNC connectors. (*2) Composite, Component and S-Video outputs share the same BNC connectors.

Specifications

General

Power requirements:
AC 100 V to 240 V, 50 Hz to 60 Hz
Power consumption:
Max. 550 W
Operating temperature:
+5°C to +40°C (+41°F to +104°F)
Storage temperature:
-20°C to +60°C (-4°F to +140°F)

Humidity:
25% to 80% (relative humidity)

Weight:
50 kg (110 lb)

Dimensions:
19 inch rack mountable 6U height
424(W) x 265(H) x 650(D) mm
(16 3/4 x 10 1/2 x 25 5/8 inches)

Operational performance

Recording/Playback time:
8 Hours
Search speed:
SHUTTLE mode:
Max. ± 500 times normal speed
(Maximum speed range $\pm 32 \dots \pm 100 \dots \pm 500$ selectable),
frame by frame (± 4 times)
JOG mode:
Up to ± 4 times normal speed
VAR mode:
Up to ± 1 times normal speed (When two ports occupied)

Cue up time:
Min. 0.5 s

Time delay:
Min. 2 seconds

Clip:
Min. duration 1 frame, up to 5,000 clips

Digital video performance

Frame rate:
1080/59.94i
Sampling frequency:
Y: 74.25 MHz/1.001, Pb/Pr: 37.125/1.001 MHz

Quantization:
10 bits/sample of input-output signal

Compression:
DCT Intraframe, HDCAM format

Digital audio performance

Sampling frequency:
48 kHz
Quantization:
20 bits

Processor adjustment range

Video:
Video level:
 ± 3 dB/∞ to 3 dB selectable
Chroma level:
 ± 3 dB/∞ to 3 dB selectable
Set up:
 ± 30 IRE
Hue:
 $\pm 30^\circ$
System sync phase:
0 \pm 1H (13.5 ns step)

Audio:
Input level:
∞ to 20 dB
Output level:
∞ to 12 dB
Output phase:
-127 to +128 samples

Input/Output

1-input/1-output configuration

Inputs:
HD SDI:
BNC (with monitoring loop-through) x1 port (R1)
SMPTE 292M/BTA S-004/ITU-R.BT 709
HD reference video:
BNC (with loop-through) x1

SD reference video:
BNC (with loop-through) x1
Digital Audio:
BNC (stereo pair x2) x1 port, AES/EBU
Time code:
BNC x1 (R1)
System time code:
BNC x1
Outputs:
HD SDI:
BNC x2 ports (P1)
SMPTE 292M/BTA S-004/ITU-R.BT 709
Downconverted SDI:
R1: BNC x1 port (with superimposed TC)
P1: BNC x2 ports (one with superimposed TC)
Digital audio:
BNC (stereo pair x2) x1 port, AES/EBU
Time code:
BNC x1 (P1)
Video monitor:
HD-SDI BNC x1 (with superimposed TC)
SD-SDI x1 (with superimposed TC)
Analog composite x1 (with superimposed TC)
Analog audio L/R:
XLR-3-pin type x2
Headphones:
JM-60 stereo phone jack

1-input/2-output configuration

Inputs:
HD SDI:
BNC (with monitoring loop-through) x1 port (R1)
SMPTE 292M/BTA S-004/ITU-R.BT 709
HD reference video:
BNC (with loop-through) x1
SD reference video:
BNC (with loop-through) x1
Digital Audio:
BNC (stereo pair x2) x1 port, AES/EBU
Time code:
BNC x1 (R1)
System time code:
BNC x1
Outputs:
HD SDI:
BNC x6 ports (two each on P1, P2, P3)
SMPTE 292M/BTA S-004/ITU-R.BT 709
Downconverted SDI:
R1: BNC x1 port (with superimposed TC)
P1: BNC x2 ports (one with superimposed TC)
P2: BNC x2 ports (one with superimposed TC)
P3: BNC x2 ports (one with superimposed TC)
Digital audio:
BNC (stereo pair x2) x3 ports, AES/EBU
Time code:
BNC x3 (P1, P2, P3)
Video monitor:
HD-SDI BNC x1 (with superimposed TC)
SD-SDI x1 (with superimposed TC)
Analog composite x1 (with superimposed TC)
Analog audio L/R:
XLR-3-pin type x2
Headphones:
JM-60 stereo phone jack

2-input/2-output configuration

Inputs:
HD SDI:
BNC (with monitoring loop-through) x2 ports (R1, R2)
SMPTE 292M/BTA S-004/ITU-R.BT 709
HD reference video:
BNC (with loop-through) x1
SD reference video:
BNC (with loop-through) x1
Digital Audio:
BNC (stereo pair x2) x2 ports, AES/EBU
Time code:
BNC x2 (R1, R2)
System time code:
BNC x1

Outputs:

HD SDI:
BNC x4 ports (two each on P1, P2)
SMPTE 292M/BTA S-004/ITU-R.BT 709
Downconverted SDI:
R1: BNC x1 port (with superimposed TC)
R2: BNC x1 port (with superimposed TC)
P1: BNC x2 ports (one with superimposed TC)
P2: BNC x2 ports (one with superimposed TC)
Digital audio:
BNC (stereo pair x2) x2 ports, AES/EBU
Time code:
BNC x2 (P1, P2)
Video monitor:
HD-SDI BNC x1 (with superimposed TC)
SD-SDI x1 (with superimposed TC)
Analog composite x1 (with superimposed TC)
Analog audio L/R:
XLR-3-pin type x2
Headphones:
JM-60 stereo phone jack

3-input/1-output configuration

Inputs:
HD SDI:
BNC (with monitoring loop-through) x3 ports (R1, R2, R3)
SMPTE 292M/BTA S-004/ITU-R.BT 709
HD reference video:
BNC (with loop-through) x1
SD reference video:
BNC (with loop-through) x1
Digital Audio:
BNC (stereo pair x2) x3 ports, AES/EBU
Time code:
BNC x2 (R1, R2)
System time code:
BNC x1
Outputs:
HD SDI:
BNC x2 ports (P1)
SMPTE 292M/BTA S-004/ITU-R.BT 709
Downconverted SDI:
R1: BNC x1 port (with superimposed TC)
R2: BNC x1 port (with superimposed TC)
R3: BNC x1 port (with superimposed TC)
P1: BNC x2 ports (one with superimposed TC)
Digital audio:
BNC (stereo pair x2) x1 port, AES/EBU
Time code:
BNC x1 (P1)
Video monitor:
HD-SDI BNC x1 (with superimposed TC)
SD-SDI x1 (with superimposed TC)
Analog composite x1 (with superimposed TC)
Analog audio L/R:
XLR-3-pin type x2
Headphones:
JM-60 stereo phone jack

Remote

RS-422A:
Remote In 1/2/3/4:
D-Sub 9-pin (F) x4, Sony 9-pin VTR protocol
or Sony 9-pin Disc protocol
Remote In/Out 1/2:
D-Sub 9-pin (F) x2, Sony 9-pin VTR control
(for external VTR control)
Remote In (To MAVF-F555):
D-Sub 9-pin (female) x1
Remote Parallel I/O:
D-Sub 50-pin (F) x1, 24 inputs (5 V CMOS),
24 outputs (Open collector)
Ethernet:
RJ45 x1, 10 Base-T
TBC Remote P1/P2/P3:
D-Sub 9-pin (female) x3, Sony 9-pin VTR protocol

Video effects

Effects:
Dissolve, Single Wipe, Split Screen

SONY

VTR Accessories/Peripherals

BKDW-101	214
BKMW-101	214
BKMW-102	214
BKMW-103	215
BKMW-104	215
BKMW-E3000	216
DSBK-1504P	217
DSBK-1601	217
DSBK-1801	217
DSBK-1803	217
DSRM-10	218
DSRM-20	218
HKDW-101	219
HKDW-102	219
RMM-131	220

BKDW-101 Remote Control Panel

Remote control panel for DVW-2000 Series Digital Betacam recorders

Applicable Models

DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder



BKMW-101 Remote Control Panel

Remote control panel for MSW-2000 series MPEG IMX VTRs

Applicable Models

MSW-2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder (/1 model)
MSW-A2000P MPEG IMX Recorder
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-M2000 MPEG IMX Recorder
MSW-M2000 MPEG IMX Recorder (/1 model)
MSW-M2000P MPEG IMX Recorder
MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2100 MPEG IMX Player
MSW-M2100 MPEG IMX Player (/1 model)
MSW-M2100P MPEG IMX Player
MSW-M2100P MPEG IMX Player (/1 model)

Optional Accessories

BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit



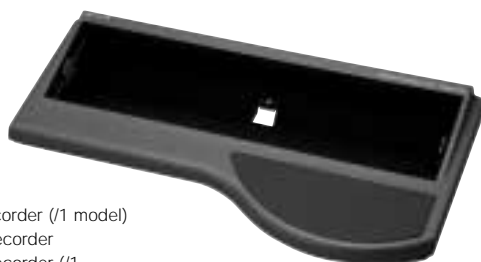
BKMW-102 Remote Control Unit

Control panel case for BKMW-101 remote control panel

Applicable Models

BKMW-101 Remote Control Panel
DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder
HDW-2000 HDCAM VTR
HDW-M2000 HDCAM VTR
HDW-M2000P HDCAM VTR
HDW-M2100 HDCAM Player
HDW-M2100P HDCAM Player
MSW-2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder (/1 model)
MSW-A2000P MPEG IMX Recorder
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-M2000 MPEG IMX Recorder

MSW-M2000 MPEG IMX Recorder (/1 model)
MSW-M2000P MPEG IMX Recorder
MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2100 MPEG IMX Player
MSW-M2100 MPEG IMX Player (/1 model)
MSW-M2100P MPEG IMX Player
MSW-M2100P MPEG IMX Player (/1 model)



BKMW-103 Control Panel Extension Kit

Control panel extension kit for MSW-2000 series MPEG
IMX VTRs and HDW-2000 series HDCAM VTRs

Applicable Models

BKMW-101 Remote Control Panel
DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder
HDW-2000 HDCAM VTR
HDW-M2000 HDCAM VTR
HDW-M2000P HDCAM VTR
HDW-M2100 HDCAM Player
HDW-M2100P HDCAM Player
MSW-2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-M2000 MPEG IMX Recorder
MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2000P MPEG IMX Recorder

MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2100 MPEG IMX Player
MSW-M2100P MPEG IMX Player (/1 model)
MSW-M2100P MPEG IMX Player (/1 model)



BKMW-104 HD Up-converter Board (*1)

Features

*Allows 1080/59.94i, 1080/50i and 720/59.94p output from the playback signals of SD 1/2-inch formats(*2), including Betacam, Betacam SP, Betacam SX and Digital Betacam as well as MPEG IMX format *Outputs HD 1125 tri-level sync signal as reference signal

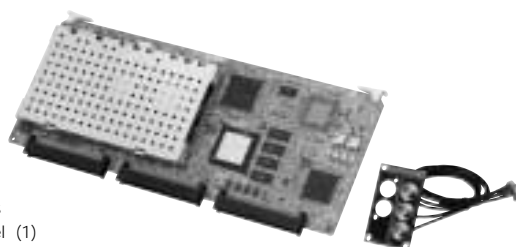
(*1) Either this board or BKMW-E3000 board can be installed in an MSW-2000 series VTR. (*2) Only from the playback-compatible format of the VTR used.

Applicable Models

DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder
MSW-2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-M2000 MPEG IMX Recorder
MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2100 MPEG IMX Player
MSW-M2100P MPEG IMX Player (/1 model)
MSW-M2100P MPEG IMX Player (/1 model)

Supplied Accessories

SDI/HD-SDI connector panel (1)
SDI INPUT connector masking blank seal (for player) (1)
VIDEO CONTROL (HD/SD) seal (1)
Attachment screws (6)
Operation and installation guide (1)
Installation manual (1)

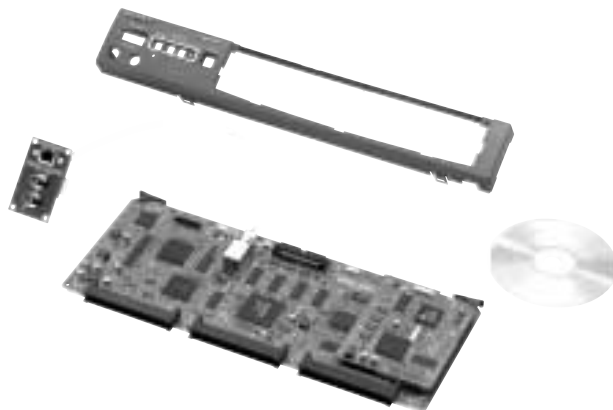


BKMW-E3000 Network Interface Board (option for e-VTR)(*1)

Features

*Adds a Gigabit Ethernet interface to an MSW-2000 series VTR to send and receive AV data as MXF(*2) files across a standard IT network *Allows MXF file output from all 1/2-inch SD format tapes including Digital Betacam, Betacam SX, Betacam SP, Betacam as well as MPEG IMX (*3) *Receives MXF files and records AV signals and metadata that are wrapped in MXF files onto an MPEG IMX cassette *Supports industry-standard network interfaces and protocols including Giga-bit/100Base-TX/10-Base Ethernet, TCP/IP, FTP, HTTP and SNMP *Simple control of file exchange from a PC using supplied e-VTR Manager software *Control of e-VTR tape transport from a PC *Content browsing function allows operators to view any material loaded in any e-VTR on the network as low-rate data *Remote monitoring of e-VTR status through a network *Remote maintenance using SNMP protocol through a network

(*1) Either this board or BKMW-104 can be installed into an MSW-2000 series VTR (*2)MXF: Material eXchange Format (*3) Playback-compatible format depends on the VTR used.



Applicable Models

MSW-2000 MPEG IMX Recorder
MSW-A2000P MPEG IMX Recorder (/1 model)
MSW-M2000P MPEG IMX Recorder (/1 model)
MSW-M2100P MPEG IMX Player (/1 model)

Supplied Accessories

CD-ROM including e-VTR application software (1)
Connector panel with RJ-45 connector (1)
Upper front panel for e-VTR operation (1)

Specifications

General

Power requirements:
+2.5V DC: 3.0A, +3.4V DC: 3.3A, +6.0V DC: 1.0A
(supplied from MSW-2000 Series VTR)
Operating temperature:
+5 to +40°C (+41 to +104° F)
Storage temperature:
-20 to +60° C (-4 to +140° F)
Operating humidity:
25 to 80% (no condensation)

Dimensions

Board (W x H):
355 x 146 mm (14 2/5 x 5 4/5 inches)
Front panel (W x H x D):
430 x 70 x 45 mm (17 2/5 x 2 4/5 x 1 4/5 inches)
Connector panel (W x H):
72 x 42 mm (2 4/5 x 1 3/5 inches)

Mass

Board:
Approx. 380 g (13.4 oz)
Front panel:
Approx. 130 g (4.6 oz)

Connector panel:

Approx. 50 g (1.8 oz)

Interface:

Network Interface, RJ-45, 1000Base-T (GbE), 100Base-TX, 10Base-T

System Requirements for the Supplied e-VTR Application Software

CPU:

1 GHz or higher

Memory:

256MB or higher

Operating System:

Windows XP/2000

Direct X:

8.11b or higher

Available hard disc space:

5 Mb or more

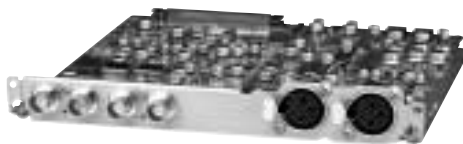
Monitor resolution:

XGA (1024 x 768) or more recommended

DSBK-1504P Analog Input Board

Features

A full range of analog interfaces – composite, component, S-Video(Y/C) and two channel analog audio – are provided.



Applicable Models
DSR-1500AP Editing Recorder

Specifications
BNC (3)
XLR-3-pin female (2)

(*)Video, Component and S-Video share the same BNC connectors.

DSBK-1601 SDI, AES/EBU Output Board

Features

Allows output of SDI (BNC x 2) and AES/EBU (BNC x 2)

Applicable Models
DSR-1600 Editing Player
DSR-1600P Editing Player



DSBK-1801 SDI, AES/EBU Input/Output Board

Features

Allows Input/Output of SDI and AES/EBU

Applicable Models
DSR-1800 Editing Recorder
DSR-1800P Editing Recorder

Specifications

Input

SDI: BNC (2)
AES/EBU: BNC (2)

Output

SDI: BNC (2)
AES/EBU: BNC(2)



DSBK-1803 i.LINK/DV Input/Output Board

Features

This i.LINK interface treats compressed DV audio/video and control signals, which allows the single cable connection with no deterioration of video and audio quality.

Applicable Models
DSR-1600 Editing Player
DSR-1600P Editing Player
DSR-1800 Editing Recorder
DSR-1800P Editing Recorder

Specifications

Connector:

Input/Output : 6-pin (1)



(*) DSR-1600/1600P: output only

DSRM-10 Remote Control Unit

Features

* Provides wired remote control operation for
STOP/REC/PAUSE/REW/PLAY/FFWD * JOG/SHUTTLE
operation * Enables ± 16 times normal speed in search
operation



Applicable Models
DSR-11 Recorder
DSR-25 Recorder
DSR-45P Recorder
DSR-1500AP Editing Recorder
DSR-50 Portable Recorder
DSR-50P Portable Recorder

Supplied Accessories
Operating manual (1)

Specifications
Power requirements:
DC 5 V (supplied from the connected VTR)
Power consumption:
50 mW
Remote control:
Stereo mini-plug (with attached cable,
length 3 m (10 ft))
Dimensions:
90 (W) \times 46 (H) \times 182 (D) mm
(3 5/8 \times 1 13/16 \times 7 1/4 inches)
Mass:
Approx. 360 g (12 oz)

DSRM-20 Remote Control Unit

Features

*Provides wired remote control operation for
STOP/REC/PAUSE/REW/PLAY/FFWD *JOG/SHUTTLE
operation *Enables ± 17 times normal speed in search
operation *Index/Date/Photo search function *Displays
tape information during playback when using the tape
recorded on the DSR-250/1, DSR-250P/1, DSR-PD170/PD170P
DVCAM Camcorders.



Applicable Models
DSR-11 Recorder
DSR-25 Recorder
DSR-45 Recorder
DSR-45P Recorder
DSR-50 Portable Recorder
DSR-50P Portable Recorder

Supplied Accessories
Operating instructions (1)

Specifications
Power requirements:
DC 5 V
Power consumption:
50 mW
Remote control:
Stereo mini-plug
(with attached cable, length 3 m (10 ft))

Dimensions:
90 (w) \times 46 (h) \times 182 (d) mm
(3 5/8 \times 1 13/16 \times 7 1/4 inches)
Mass:
Approx. 360 g (12 oz)

HKDW-101 Remote Control Panel

Remote control panel for HDW-2000 series VTRs

Applicable Models

HDW-2000 HDCAM VTR
HDW-M2000 HDCAM VTR
HDW-M2000P HDCAM VTR
HDW-M2100 HDCAM Player
HDW-M2100P HDCAM Player



HKDW-102 SDTI (HDCAM) Interface Board

Features

*Adds SDTI (HDCAM) input and output capabilities to an HDW-2000 series VTR

Applicable Models

HDW-2000 HDCAM VTR
HDW-M2000 HDCAM VTR
HDW-M2000P HDCAM VTR
HDW-M2100 HDCAM Player
HDW-M2100P HDCAM Player

Supplied Accessories

"SDTI (HDCAM)" label (1)
Spacer (5 mm (7/32 inch)) (4)
Spacer (10 mm (13/32 inch)) (4)
Fitting screw (8)
Cable clamp (1)
Operation and installation guide (1)
Installation manual (1)



RMM-131 Rack Mount Kit

Rack mount kit for HDW-2000/MSW-2000/Betacam SP/DVCAM series VTRs

Applicable Models

DSR-1600 Editing Player
 DSR-1600P Editing Player
 DSR-1800 Editing Recorder
 DSR-1800P Editing Recorder
 DSR-2000 Editing Recorder
 DSR-2000P Editing Recorder
 DWV-2000 Digital Betacam Recorder
 DWV-2000P Digital Betacam Recorder
 DWV-M2000 Digital Betacam Recorder
 DWV-M2000P Digital Betacam Recorder
 HDW-2000 HDCAM VTR
 HDW-M2000 HDCAM VTR
 HDW-M2000P HDCAM VTR
 HDW-M2100 HDCAM Player
 HDW-M2100P HDCAM Player
 MSW-2000 MPEG IMX Recorder
 MSW-A2000 MPEG IMX Recorder
 MSW-A2000 MPEG IMX Recorder (/1 model)
 MSW-A2000P MPEG IMX Recorder
 MSW-A2000P MPEG IMX Recorder (/1 model)
 MSW-M2000 MPEG IMX Recorder
 MSW-M2000 MPEG IMX Recorder (/1 model)
 MSW-M2000P MPEG IMX Recorder
 MSW-M2000P MPEG IMX Recorder (/1 model)
 MSW-M2100 MPEG IMX Player
 MSW-M2100 MPEG IMX Player (/1 model)
 MSW-M2100P MPEG IMX Player
 MSW-M2100P MPEG IMX Player (/1 model)



Digital Video Switchers

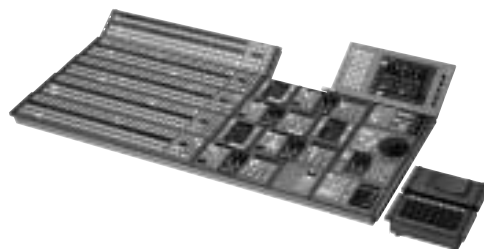
MVS-8000A	222
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DVS-9000	226
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MFS-2000	230
AWS-G500	231
BKAW-550	232
BKAW-570	232

MVS-8000A Multi-Format Switcher Processor

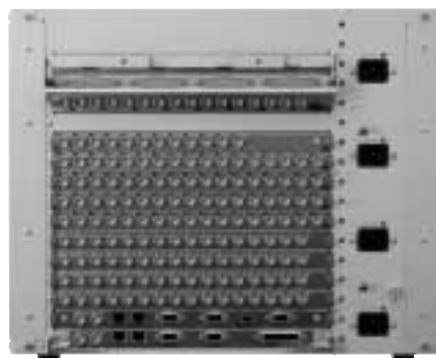
The MVS-8000A is a multi-format switcher processor with a compact frame size only 8 RU high. The MVS-8000A offers a variety of option boards for flexible configurations from 2M/E to 4M/E. The MVS-8000A works as the main processor of the MVS-8000A switcher system with the CCP-8000/CCP-9000 Center Control Panel, MVE-8000A/MVE-9000 Multi Format DME Processor, and MKS-8700/MKS-2700 Device Control Unit.

Features

*Multi-format capability: 1080i/60, 59.94, 50, 1080p/30, 29.97, 25, 24, 23.976, 720p/59.94, 480i/59.94, 576i/50
 *2-, 2.5-, 3-, 3.5-, or 4-Mix/Effects configurations *Layout free CCP-8000 series control panels *Creative M/E functionality: Four full function keyers per M/E, Multiple M/E Program output configurations *Independent M/E functionality, 4:3 / 16:9, Crosspoint Assignments and Bus Toggle on/off, Snapshots, Keyframe and various setups
 *Up to 80 inputs and 56 outputs (including 8 monitor outputs) *Integrated device control for VTRs, Digital Disc Recorders, Digital Multi-Effects, Routing Switchers and more *Multi-panel / Multi-processor operations *Can store 58 frames of HD images *The frame memory systems has eight simultaneous outputs *Programmable Macro capability supported *Integrated 3D DME or external DME control *Remote maintenance and image file exchange via Ethernet network *User programmable tally conditions and multi-level tally



MVS Switcher Control Panel



MVS-8000A Multi-Format Switcher Processor

Supplied Accessories

75 Ω terminator (1)
 Bracket (4)
 Support angle (2)
 Screw (+B 4 x 10) (8)
 Screw (+PSW 4 x 10) (8)
 Operation manual (1)
 Installation manual (1)

Optional Accessories

MKE-8021A INPUT/OUTPUT BOARD (SDI)
 SWC-5005 Control Panel Cable
 SWC-5010 Control Panel Cable
 MKS-8160A 24-Output Board Set (HD/SD Multi-format)
 MKS-8210A MIX/EFFECT BOARD
 MKS-8440A FRAME MEMORY BOARD
 MVE-8000A Multi-Format DME Processor
 MKE-8020A MVS INTERFACE BOARD
 MKE-8040A EFFECTS BOARD (MVE-8000A)
 HK-PSU02 Power Supply Unit
 MKE-9020M MVS Interface Board Set for the MVE-9000
 MKE-9021M Input/Output Board Set for the MVE-9000
 MKE-9040M Advanced Effects Board for the MVE-9000
 HK-PSU03 Backup Power Supply Unit
 MKS-2700 Device Control Unit
 HK-PSU01 Power Supply Unit

Optional Panels

MKS-8011 Menu Panel
 MKS-8013 32 Aux Bus Module
 MKS-8013B 32 Aux Bus Module
 MKS-8014 24 Aux Bus Module

MKS-8014B 24 Aux Bus Module
 MKS-8015 16 Aux Bus Module
 MKS-8015B 16 Aux Bus Module
 MKS-8017 32 Crosspoint Module
 MKS-8017B 32 Crosspoint Module
 MKS-8018 24 Crosspoint Module
 MKS-8018B 24 Crosspoint Module
 MKS-8019 16 Crosspoint Module
 MKS-8019B 16 Crosspoint Module
 MKS-8020 Standard Transition Module
 MKS-8021 Simple Transition Right Module
 MKS-8022 Simple Transition Left Module
 MKS-8023 Compact Key Transition Module
 MKS-8024 Flexipad Module
 MKS-8025 Memory Card/USB Module
 MKS-8026 10 Keypad Module
 MKS-8027 Compact Transition Right Module
 MKS-8028 Compact Transition Left Module
 MKS-8030 Key Frame Module
 MKS-8031JS Joy Stick Module
 MKS-8032 DSK Fader Module
 MKS-8033 Utility/Shotbox Module
 MKS-8034DK DSK/FTB Module
 MKS-8035 Key Control Module
 MKS-8040 Blank Panel
 MKS-8041 Blank Panel
 MKS-8075 Extension Adaptor
 MKS-8076 Memory Card/USB Adaptor
 MKS-8080 Aux Bus Remote Panel
 MKS-8082 Aux Bus Remote Panel
 MKS-9011 1 M/E Control Panel
 MKS-9012 2 M/E Control Panel

Optional Boards

MKS-8110M 17-Input Board (HD/SD Multi-format)

MKS-8111M Additional 12-Input Board (HD/SD Multi-format)
 MKS-8161M 8 Monitor Output Board (HD/SD Multi-format)
 MKS-8170M DME Interface Board (HD/SD Multi-format)
 MKS-8420M Color Correction Board for the MVS-8000 Series Switcher
 MKS-8110HD 17-Input Board (HD)

Optional Software

BZPS-8000 System Management Software
 BZPS-8001 Switcher Setup Software

Optional Peripherals

UCP-8060 Universal Control Panel
 MKS-8010 System Control Unit
 MKS-8700 Device Control Unit
 MKS-8701 Tally/GPI Output Board
 MKS-8702 Serial Interface Board
 HK-PSU04 Power Supply Unit
 MVE-9000 Multi-format DME Processor

Not supplied: AC power cord (Part No 1-557-377-11 (USA and Canada), Part No. 1-782-929-21 (Europe))

Digital Video Switchers

Specifications

General

Power requirements:

100-240 V AC +/- 10%, 50/60 Hz

Power consumption

MVS-8000A Switcher processor:

15 to 6.25 A

MVE-8000A DME processor:

2.5 to 1.0 A

MVE-9000 DME processor:

6.0 to 2.5 A

MKS-8700 Device control unit:

1.4 to 0.8A

MKS-2700 Device control unit:

5.0 to 2.1A

Dimensions (W x H x D, without projection)

MVS-8000A Switcher processor:

482 x 354 x 520 mm

(19 x 14 x 20 1/2 inches)

MVE-8000A DME processor:

440 x 87.5 x 520 mm

(17 3/8 x 3 1/2 x 20 1/2 inches)

Main panel

4 M/E, 32 crosspoint buttons:

1443 (with Mount Bracket) x 98 (max.) x

528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

3 M/E, 32 crosspoint buttons:

1443 (with mounting bracket) x 98 (max.)

x 528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

2 M/E, 24 crosspoint buttons:

1291 (with mounting bracket) x 92 (max.)

x 396 mm

(50 7/8 x 3 5/8 x 15 5/8 inches)

AUX BUS panel

32 crosspoint buttons:

782 (with mounting bracket) x 132 x 80

(max.) mm

(30 7/8 x 5 1/4 x 3 1/4 inches)

24 crosspoint buttons:

630 (with mounting bracket) x 132 x 80

(max.) mm

(24 7/8 x 5 1/4 x 3 1/4 inches)

Menu panel:

424 x 220 x 46 mm

(16 3/4 x 83/4 x 1 13/16 inches)

Memory card/USB adaptor:

263 (with mounting bracket) x132 x 78.5

mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

Extension adaptor:

263 (with mounting bracket) x132 x 78.5 mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

MKS-8700 Device control unit:

482 x 132 x 520 mm

(19 x 5 1/4 x 20 1/2 inches)

MKS-2700 Device control unit:

440 x 43.6 x 520 mm

(17 3/8 x 1 3/4 x 20 1/2 inches)

Mass

MVS-8000A Switcher processor:

Approx. 51 kg (112 lb 7 oz) (fully loaded)

MVE-8000A DME processor:

Approx. 16 kg (35 lb 4 oz) (fully loaded)

Main panel (4 M/E, 32 crosspoint buttons):

Approx. 30 kg (66 lb 2 oz)

AUX BUS panel (32 crosspoint buttons):

Approx. 3.7 kg (8 lb 2 oz)

Menu panel:

Approx. 2.2 kg (4 lb 13 oz)

Extension adaptor (with fader):

Approx. 1.5 kg (3 lb 4 oz) (with module)

Memory card/USB adaptor:

Approx. 1.2 kg (2 lb 10 oz) (with module)

MKS-8700 Device control unit:

Approx. 8 kg (17 lb 10 oz)

MKS-2700 Device control unit:

Approx. 9.8 kg (21 lb 10 oz) (fully loaded)

Operation temperature:

+5 °C to +40 °C (+41°F to +104°F)

Operating humidity:

10% to 90% (non-condensing)

Serial digital video inputs

MVS-8000A Switcher processor

Primary Inputs:

Max. 80, BNC x 1 each,

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Serial digital video outputs

MVS-8000A Switcher processor

Assignable outputs:

Max. 48,

OUT 1 to 4, 13 to 16, 25 to 28, 37 to 40:

BNC x 2 each

OUT 5 to 12, 17 to 24, 29 to 36, 41 to 48:

BNC x 1 each

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Monitor outputs:

Max. 12, BNC x 2 each

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Dedicated switcher/DME video I/O

MVS-8000A Switcher processor

Integrated DME I/O:

68-pin x 4, LVDS

MVE-8000A DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2),

LVDS

MVE-9000 DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2),

LVDS

Reference

Switcher processor, DME processor, system

control unit, device control unit

Reference input:

BNC x 2, 75 Ω with loop-through output

HDTV systems: HD tri-level sync/SDTV

analog sync

SDTV systems: Analog black burst/analog

sync

Switcher processor

Reference output:

BNC x 1, 75 Ω

HDTV systems: HD tri-level sync

SDTV systems: Analog sync

System interface

MVS-8000A Switcher processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Remote 1:

D-sub 9-pin, RS-422A

Remote 2:

D-sub 9-pin, RS-422A

Remote 3:

D-sub 9-pin, RS-422A

Remote 4:

D-sub 9-pin, RS-422A

Terminal:

D-sub 9-pin, RS-232C

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Extension:

BNC x 1

MVE-8000A DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

MVE-9000 DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin x 2, dry contact or open

collector inputs x 16/

relay contact outputs x 8 /

open collector outputs x 8

CCP-8000 Series System control unit

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

GPI:

D-sub 25-pin, TTL Level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Remote:

BNC x 1, S-BUS

LTC:

BNC x 1

Device:

USB type A

MKS-8700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Serial tally 1:

D-sub 9-pin x 1, RS-422A

Serial tally 2:

D-sub 9-pin x 1, RS-422A

TALLY/GPI inputs:

D-sub 37-pin x 3, TTL level inputs x 34 each

TALLY/GPI outputs *:

D-sub 37-pin, relay contact outputs 18ch,

up to 270 ch in step of 5 ch in a frame

Remote*:

D-sub 9-pin, RS-422A, various protocols,

up to 30 ports in steps of 6 ports in a frame

MKS-2700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

TALLY/GPI inputs:

D-sub 37-pin x 1, TTL level inputs x 34

TALLY/GPI outputs :

D-sub 37-pin x 2, TTL level inputs x 18

each

Remote:

D-sub 9-pin x 6, RS-422A, various protocols

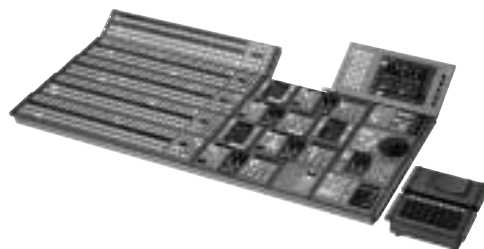
* TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports is supported.

MVS-8000ASF Multi-Format Switcher Processor

The MVS-8000ASF is a multi-format switcher processor with a compact frame size only 4 RU high. The MVS-8000ASF offers a variety of option boards for flexible configurations from 1M/E to 2.5M/E. The MVS-8000ASF works as the main processor of the MVS-8000ASF switcher system with the CCP-8000/CCP-9000 Center Control Panel, MVE-8000A/MVE-9000 Multi Format DME Processor, and MKS-8700/MKS-2700 Device Control Unit.

Features

- *Multi-format capability: 1080i/60, 59.94, 50, 1080p/30, 29.97, 25, 24, 23.976, 720p/59.94, 480i/59.94, 576i/50
- *1-, 1.5-, or 2-Mix/Effects configurations
- *Layout free CCP-8000 series control panels
- *Creative M/E functionality: Four full function keyers per M/E, Multiple M/E Program output configurations
- *Independent M/E functionality, 4:3 / 16:9, Crosspoint Assignments and Bus Toggle on/off, Snapshots, Keyframe and various setups
- *Up to 34 inputs and 32 outputs (including 8 monitor outputs)
- *Integrated device control for VTRs, Digital Disc Recorders, Digital Multi-Effects, Routing Switchers and more
- *Multi-panel / Multi-processor operations
- *Can store 58 frames of HD images
- *The frame memory systems has eight simultaneous outputs
- *Programmable Macro capability supported
- *Integrated 3D DME or external DME control
- *Remote maintenance and image file exchange via Ethernet network
- *User programmable tally conditions and multi-level tally



MVS Switcher Control Panel



MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

- 75 Ω terminator (1)
- Bracket (4)
- Support angle (2)
- Screw (+B 4 x 10) (8)
- Screw (+PSW 4 x 10) (8)
- Operation manual (1)
- Installation manual (1)

Optional Accessories

- MKE-8021A INPUT/OUTPUT BOARD (SDI)
- SWC-5005 Control Panel Cable
- SWC-5010 Control Panel Cable
- MKS-8210A MIX/EFFECT BOARD
- MKS-8440A FRAME MEMORY BOARD
- MVE-8000A Multi-Format DME Processor
- MKE-8020A MVS INTERFACE BOARD
- MKE-8040A EFFECTS BOARD (MVE-8000A)
- HK-PSU02 Power Supply Unit
- MKE-9020M MVS Interface Board Set for the MVE-9000
- MKE-9021M Input/Output Board Set for the MVE-9000
- MKE-9040M Advanced Effects Board for the MVE-9000
- HK-PSU03 Backup Power Supply Unit
- MKS-2700 Device Control Unit
- HK-PSU01 Power Supply Unit

Optional Panels

- MKS-8011 Menu Panel
- MKS-8013 32 Aux Bus Module
- MKS-8013B 32 Aux Bus Module
- MKS-8014 24 Aux Bus Module
- MKS-8014B 24 Aux Bus Module

- MKS-8015 16 Aux Bus Module
- MKS-8015B 16 Aux Bus Module
- MKS-8017 32 Crosspoint Module
- MKS-8017B 32 Crosspoint Module
- MKS-8018 24 Crosspoint Module
- MKS-8018B 24 Crosspoint Module
- MKS-8019 16 Crosspoint Module
- MKS-8019B 16 Crosspoint Module
- MKS-8020 Standard Transition Module
- MKS-8021 Simple Transition Right Module
- MKS-8022 Simple Transition Left Module
- MKS-8023 Compact Key Transition Module
- MKS-8024 Flexipad Module
- MKS-8025 Memory Card/USB Module
- MKS-8026 10 Keypad Module
- MKS-8027 Compact Transition Right Module
- MKS-8028 Compact Transition Left Module
- MKS-8030 Key Frame Module
- MKS-8031JS Joy Stick Module
- MKS-8032 DSK Fader Module
- MKS-8033 Utility/Shotbox Module
- MKS-8034DK DSK/FTB Module
- MKS-8035 Key Control Module
- MKS-8040 Blank Panel
- MKS-8041 Blank Panel
- MKS-8075 Extension Adaptor
- MKS-8076 Memory Card/USB Adaptor
- MKS-8080 Aux Bus Remote Panel
- MKS-8082 Aux Bus Remote Panel
- MKS-9011 1 M/E Control Panel
- MKS-9012 2 M/E Control Panel

Optional Boards

- MKS-8110M 17-Input Board (HD/SD Multi-format)

- MKS-8170M DME Interface Board (HD/SD Multi-format)
- MKS-8420M Color Correction Board for the MVS-8000 Series Switcher
- MKS-8110HD 17-Input Board (HD)

Optional Software

- BZPS-8000 System Management Software
- BZPS-8001 Switcher Setup Software

Optional Peripherals

- UCP-8060 Universal Control Panel
- MKS-8010 System Control Unit
- MKS-8700 Device Control Unit
- MKS-8701 Tally/GPI Output Board
- MKS-8702 Serial Interface Board
- HK-PSU04 Power Supply Unit
- MVE-9000 Multi-format DME Processor

Not supplied: AC power cord (Part No. 1-557-377-11 (USA and Canada), Part No. 1-782-929-21 (Europe))

Digital Video Switchers

Specifications

General

Power requirements:

100-240 V AC +/- 10%, 50/60 Hz

Power consumption

MVS-8000ASF Switcher processor:

7.5 to 3.1 A

MVE-8000A DME processor:

2.5 to 1.0 A

MVE-9000 DME processor:

6.0 to 2.5 A

MKS-8700 Device control unit:

1.4 to 0.8A

MKS-2700 Device control unit:

5.0 to 2.1A

Dimensions (W x H x D, without projection)

MVS-8000ASF Switcher processor:

482 x 177 x 520 mm

(19 x 7 x 20 1/2 inches)

MVE-8000A DME processor:

440 x 87.5 x 520 mm

(17 3/8 x 3 1/2 x 20 1/2 inches)

Main panel

4 M/E, 32 crosspoint buttons:

1443 (with Mount Bracket) x 98 (max.) x

528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

3 M/E, 32 crosspoint buttons:

1443 (with mounting bracket) x 98

(max.) x 528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

2 M/E, 24 crosspoint buttons:

1291 (with mounting bracket) x 92

(max.) x 396 mm

(50 7/8 x 3 5/8 x 15 5/8 inches)

AUX BUS panel

32 crosspoint buttons:

782 (with mounting bracket) x 132 x 80

(max.) mm

(30 7/8 x 5 1/4 x 3 1/4 inches)

24 crosspoint buttons:

630 (with mounting bracket) x 132 x 80

(max.) mm

(24 7/8 x 5 1/4 x 3 1/4 inches)

Menu panel:

424 x 220 x 46 mm

(16 3/4 x 83/4 x 1 13/16 inches)

Memory card/USB adaptor:

263 (with mounting bracket) x132 x

78.5 mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

Extension adaptor:

263 (with mounting bracket) x132 x

78.5 mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

MKS-8700 Device control unit:

482 x 132 x 520 mm

(19 x 5 1/4 x 20 1/2 inches)

MKS-2700 Device control unit:

440 x 43.6 x 520 mm

(17 3/8 x 1 3/4 x 20 1/2 inches)

Mass

MVS-8000ASF Switcher processor:

Approx. 28 kg (61 lb 12 oz) (fully

loaded)

MVE-8000A DME processor:

Approx. 16 kg (35 lb 4 oz) (fully loaded)

Main panel (4 M/E, 32 crosspoint buttons):

Approx. 30 kg (66 lb 2 oz)

AUX BUS panel (32 crosspoint buttons):

Approx. 3.7 kg (8 lb 2 oz)

Menu panel:

Approx. 2.2 kg (4 lb 13 oz)

Extension adaptor (with fader):

Approx. 1.5 kg (3 lb 4 oz) (with module)

Memory card/USB adaptor:

Approx. 1.2 kg (2 lb 10 oz) (with module)

MKS-8700 Device control unit:

Approx. 8 kg (17 lb 10 oz)

MKS-2700 Device control unit:

Approx. 9.8 kg (21 lb 10 oz) (fully loaded)

Operation temperature:

+5 °C to +40 °C (+41°F to +104°F)

Operating humidity:

10% to 90% (non-condensing)

Serial digital video inputs

MVS-8000ASF Switcher processor

Primary Inputs:

Max. 34, BNC x 1 each,

SMPTE292M (HDTV), SMPTE259M-C (SDTV)

Serial digital video outputs

MVS-8000ASF Switcher processor

Assignable outputs:

OUT 1 to 4, 13 to 16: BNC x 2 each

OUT 5 to 12, 17 to 24: BNC x 1 each

Dedicated switcher/DME video I/O

MVS-8000ASF Switcher processor

Integrated DME I/O:

68-pin x 4, LVDS

MVE-8000A DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS

MVE-9000 DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS

Reference

Switcher processor, DME processor, system control unit, device control unit

Reference input:

BNC x 2, 75 Ω with loop-through output

HDTV systems: HD tri-level sync/SDTV

analog sync

SDTV systems: Analog black

burst/analog sync

Switcher processor

Reference output:

BNC x 1, 75 Ω

HDTV systems: HD tri-level sync

SDTV systems: Analog sync

System interface

MVS-8000ASF Switcher processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Remote 1:

D-sub 9-pin, RS-422A

Remote 2:

D-sub 9-pin, RS-422A

Remote 3:

D-sub 9-pin, RS-422A

Remote 4:

D-sub 9-pin, RS-422A

Terminal:

D-sub 9-pin, RS-232C

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Extension:

BNC x 1

MVE-8000A DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

MVE-9000 DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin x 2, dry contact or open

collector inputs x 16 /

relay contact outputs x 8 /

open collector outputs x 8

CCP-8000 Series System control unit

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

GPI:

D-sub 25-pin, TTL Level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Remote:

BNC x 1, S-BUS

LTC:

BNC x 1

Device:

USB type A

MKS-8700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Serial tally 1:

D-sub 9-pin x 1, RS-422A

Serial tally 2:

D-sub 9-pin x 1, RS-422A

TALLY/GPI inputs:

D-sub 37-pin x 3, TTL level inputs x 34

each

TALLY/GPI outputs *:

D-sub 37-pin, relay contact outputs

18ch,

up to 270 ch in step of 5 ch in a frame

Remote*:

D-sub 9-pin, RS-422A, various protocols,

up to 30 ports in steps of 6 ports in a

frame

MKS-2700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

TALLY/GPI inputs:

D-sub 37-pin x 1, TTL level inputs x 34

TALLY/GPI outputs :

D-sub 37-pin x 2, TTL level inputs x 18

each

Remote:

D-sub 9-pin x 6, RS-422A, various

protocols

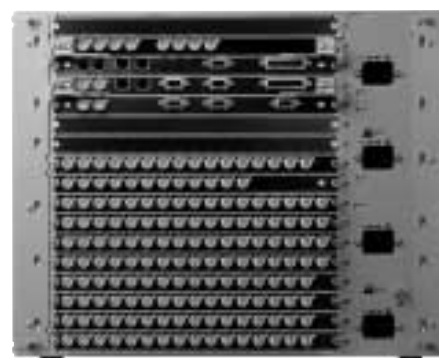
* TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports is supported.

DVS-9000 Production Switcher Processor

Compared to conventional SD switchers, the DVS-9000 Series offers greater system flexibility, a range of enhanced functions and a more compact design. The system-control structure and setup/effect data of the DVS-9000 Series switchers are compatible with the MVS-8000 Series switchers. This enables you to configure a mixed DVS-9000 Series and MVS-8000 Series setup, and also provides a smooth migration path from SD to HD operations, with minimal cost and system reconfiguration.

Features

- *525/625 switchable *8RU frame provides up to 80 primary inputs, 48 outputs and 8 monitor outputs *2-, 3- and 4-M/E configurations are available *Creative M/E functionality — Four full-function keyers per M/E, Multiple M/E program output configuration *Independent M/E functionality — 4:3/16:9 modes, crosspoint assignment, BUS toggle on/off, Snapshots, and keyframe can be set independently for each M/E *RGB color-corrector option (supported in the future) *Redundant power supply can be installed *Low power consumption — Switcher processor and built-in DME consume less than 750 W
- *Sophisticated DME — BKDS-9470 DME Board Set *Two 100base-TX network interfaces — Multi-panel and multi-processor operation, Remote maintenance and image file exchange, Set up, effect and image data transfer *Compatible panels and peripherals with MVS-8000 Series Switchers — CCP-8000 Series and CCP-9000 Series Control Panels, MKS-8700 Device Control Unit, MKS-8080/8082 Aux Bus Remote Panel, UCP-8060 Universal Control Panel



Supplied Accessories

- 75 Ω terminator (1)
- Bracket (4)
- Support angle (2)
- Screw (+B 4 x 10) (8)
- Screw (+PSW 4 x 10) (8)
- Operation manual (1)
- Installation manual (1)

Optional Panels

- SWC-5002 Control Panel Cable
- SWC-5005 Control Panel Cable
- SWC-5010 Control Panel Cable
- MKS-9011 1 M/E Control Panel
- MKS-9012 2 M/E Control Panel
- MKS-8011 Menu Panel
- MKS-8013 32 Aux Bus Module
- MKS-8013B 32 Aux Bus Module
- MKS-8014 24 Aux Bus Module
- MKS-8014B 24 Aux Bus Module
- MKS-8015 16 Aux Bus Module
- MKS-8015B 16 Aux Bus Module
- MKS-8017 32 Crosspoint Module
- MKS-8017B 32 Crosspoint Module
- MKS-8018 24 Crosspoint Module
- MKS-8018B 24 Crosspoint Module
- MKS-8019 16 Crosspoint Module
- MKS-8019B 16 Crosspoint Module
- MKS-8020 Standard Transition Module
- MKS-8021 Simple Transition Right Module
- MKS-8022 Simple Transition Left Module

- MKS-8023 Compact Key Transition Module
- MKS-8024 Flexipad Module
- MKS-8025 Memory Card/USB Module
- MKS-8026 10 Keypad Module
- MKS-8027 Compact Transition Right Module
- MKS-8028 Compact Transition Left Module
- MKS-8030 Key Frame Module
- MKS-8031JS Joy Stick Module
- MKS-8031TB Track Ball Module
- MKS-8032 DSK Fader Module
- MKS-8033 Utility/Shotbox Module
- MKS-8034FB FTB Module
- MKS-8034DK DSK/FTB Module
- MKS-8035 Key Control Module
- MKS-8040 Blank Panel
- MKS-8041 Blank Panel
- MKS-8075 Extension Adaptor
- MKS-8076 Memory Card/USB Adaptor
- MKS-8010 System Control Unit

Optional Boards

- MKS-8110SD 17-Input Board (SD)
- MKS-8111SD Additional 12-Input Board (SD)
- BKDS-9160 24-Output Board
- BKDS-9161 8 Monitor Output Board
- BKDS-9210 Mix/Effect Board
- BKDS-9470 DME Board Set

Optional Software

- BZPS-8000 System Management Software
- BZPS-8001 Switcher Setup Software

- BZS-9250 Additional simple PGM/PST function for the DVS-9000 Series switcher system
- BZS-9420 Color Correction Software for the DVS-9000 Series Switcher

Optional Peripherals

- MKS-8080 Aux Bus Remote Panel
- MKS-8082 Aux Bus Remote Panel
- UCP-8060 Universal Control Panel
- MKS-8700 Device Control Unit
- MKS-8701 Tally/GPI Output Board
- MKS-8702 Serial Interface Board
- HK-PSU04 Power Supply Unit
- HK-PSU03 Backup Power Supply Unit

Not supplied: AC power cord (Part No 1-557-377-11 (USA and Canada), Part No. 1-782-929-21 (Europe))

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz

Power consumption
DVS-9000:
8.6 to 4.2 A
CCP-8000 Series:
3.3 to 1.4 A
CCP-9000 Series:
0.9 to 0.4 A
Device control unit:
1.4 to 0.8 A

Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)
DVS-9000:
482 x 354 x 520 mm (19 x 14 x 20 1/2 inches)
CCP-8000 Series
Main Panel
4M/E, 32-crosspoint buttons:
1443 (with mount bracket) x 98.5 x 528 mm (56 7/8 x 4 x 20 7/8 inches)
3M/E, 24-crosspoint buttons:
1291 (with mount bracket) x 98.5 x 528 mm (50 7/8 x 4 x 20 7/8 inches)
2M/E, 16-crosspoint buttons:
1139 (with mount bracket) x 98.5 x 396 mm (44 7/8 x 4 x 15 5/8 inches)
Auxiliary Bus Panel
32-crosspoint buttons:
782 (with mount bracket) x 132 x 80 mm (30 7/8 x 5 1/4 x 3 1/4 inches)
24-crosspoint buttons:
630 (with mount bracket) x 132 x 80 mm (24 7/8 x 5 1/4 x 3 1/4 inches)
16-crosspoint buttons:
478 (with mount bracket) x 132 x 80 mm (18 7/8 x 5 1/4 x 3 1/4 inches)
Menu Panel:
424 x 220 x 46 mm (16 3/4 x 8 3/4 x 1 13/16 inches)
System Control Unit:
482 x 132 x 520 mm (19 x 5 1/4 x 20 1/2 inches)
CCP-9000 Series
Main Panel
2M/E, 12-crosspoint buttons/1M/E, 12-crosspoint buttons:
478 (with mount bracket) x 208 x 442 mm (18 7/8 x 8 1/4 x 17 1/2 inches)
Menu Panel:
424 x 220 x 46 mm (16 3/4 x 8 3/4 x 1 13/16 inches)
Device Control Unit:
482 x 132 x 520 mm (19 x 5 1/4 x 20 1/2 inches)
Memory Card/USB Adaptor:
263 (with mount bracket) x 132 x 78.5 mm (10 3/8 x 5 1/4 x 3 1/8 inches)

Extension Adaptor:
263 (with mount bracket) x 132 x 78.5 mm (10 3/8 x 5 1/4 x 3 1/8 inches)

Mass
DVS-9000:
Approx. 43 kg (94 lb 13 oz)
CCP-8000 Series
Main Panel (4M/E, 32-crosspoint buttons):
30 kg (66 lb 2 oz)
Auxiliary Bus Panel (32-crosspoint buttons):
3.7 kg (8 lb 2 oz)
Menu Panel:
2.2 kg (4 lb 13 oz)
System Control Unit:
12 kg (26 lb 7 oz)
CCP-9000 Series
Main Panel
2M/E, 12-crosspoint buttons:
12.5 kg (27 lb 9 oz)
1M/E, 12-crosspoint buttons:
11.5 kg (25 lb 6 oz)
Menu Panel:
2.2 kg (4 lb 13 oz)
Device Control Unit:
18 kg (39 lb 10 oz) (Fully loaded)
Memory Card/USB Adaptor:
1.2 kg (2 lb 10 oz) (with module)
Extension Adaptor:
1.5 kg (3 lb 4 oz) (with module)

Video inputs

Primary inputs:
BNC type connector x 1 each,
Max.80
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
Input return loss:
15 dB
Cable length:
200 m (with Belden8281, 5C-2V or equivalent coaxial cable)
External inputs (Built-in DME):
BNC type connector x 4,
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
Input return loss:
15 dB
Cable length:
200 m (with Belden8281, 5C-2V or equivalent coaxial cable)
Reference inputs:
BNC type x 2, loop-through, analog black burst or analog sync

Video outputs

OUT 1 to 48
OUT 1 to 4, 13 to 16, 25 to 28, 37 to 40:
BNC type connectors x 2 each
Out 5 to 12, 17 to 24, 29 to 36, 41 to 48:
BNC type connector x 1 each
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, C135270 Mb/s, 75 Ω
OUT 49 to 56 (Monitor outputs):
BNC type connectors x 2 each
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
MONITOR OUT 1 to 4 (built-in DME MONITOR OUTPUT):
BNC type connector x 1 each
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
Reference output:
BNC type x 1, analog sync

Control

Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
REMOTE 1 to 4:
D-SUB 9-pin, RS-422A
TERMINAL:
D-SUB 9-pin, RS-232C
GPI:
D-SUB 25-pin, female, relay contact outputs x 4, open collector outputs x 4
EXTENSION:
BNC type connector x 1
Built-in DME
Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
REMOTE:
D-SUB 9-pin, RS-422A
GPI:
D-SUB 25-pin, female, relay contact outputs x 4, open collector outputs x 4
CCP-9000 Series
Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
Peripheral LAN:
RJ-45, 100Base-TX
GPI:
D-SUB 25-pin, relay contact outputs x 4, open collector outputs x 4
Remote:
BNC type, S-BUS
Device:
USB type A
Main Panel:
D-sub 50-pin
Menu Panel:
D-sub 50-pin
Ext Panel:
D-sub 50-pin
Device Control Unit
Peripheral LAN:
RJ-45, 100Base-TX
Serial tally 1 to 2:
D-sub 9-pin, RS-422A
TALLY/GPI inputs:
D-sub 37-pin x3, TTL level inputs x 34 each,
TALLY/GPI outputs *:
D-sub 37-pin, relay contact outputs 18-ch, up to 15 ports in steps of 3 ports in a frame
REMOTE *:
D-sub 9-pin, RS-422A, various protocols, up to 30 ports in steps of 6 ports in a frame

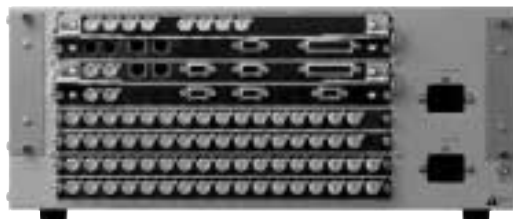
TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports are supported.

DVS-9000SF Production Switcher Processor

Compared to conventional SD switchers, the DVS-9000 Series offers greater system flexibility, a range of enhanced functions and a more compact design. The system-control structure and setup/effect data of the DVS-9000 Series switchers are compatible with the MVS-8000 Series switchers. This enables you to configure a mixed DVS-9000 Series and MVS-8000 Series setup, and also provides a smooth migration path from SD to HD operations, with minimal cost and system reconfiguration.

Features

- *525/625 switchable *4RU frame provides up to 34 primary inputs, 24 outputs *1- and 2-M/E configurations are available *Creative M/E functionality — Four full-function keyers per M/E, Multiple M/E program output configuration *Independent M/E functionality — 4:3/16:9 modes, crosspoint assignment, BUS toggle on/off, Snapshots, and keyframe can be set independently for each M/E *RGB color-corrector option (supported in the future) *Redundant power supply can be installed *Low power consumption — Switcher processor and built-in DME consume less than 750 W *Sophisticated DME — BKDS-9470 DME Board Set *Two 100base-TX network interfaces — Multi-panel and multi-processor operation, Remote maintenance and image file exchange, Set up, effect and image data transfer *Compatible panels and peripherals with MVS-8000 Series Switchers — CCP-8000 Series and CCP-9000 Series Control Panels, MKS-8700 Device Control Unit, MKS-8080/8082 Aux Bus Remote Panel, UCP-8060 Universal Control Panel



Supplied Accessories

- 75 Ω terminator (1)
- Bracket (4)
- Support angle (2)
- Screw (+B 4 x 10) (8)
- Screw (+PSW 4 x 10) (8)
- Operation manual (1)
- Installation manual (1)

Optional Panels

- SWC-5002 Control Panel Cable
- SWC-5005 Control Panel Cable
- SWC-5010 Control Panel Cable
- MKS-9011 1 M/E Control Panel
- MKS-9012 2 M/E Control Panel
- MKS-8011 Menu Panel
- MKS-8013 32 Aux Bus Module
- MKS-8013B 32 Aux Bus Module
- MKS-8014 24 Aux Bus Module
- MKS-8014B 24 Aux Bus Module
- MKS-8015 16 Aux Bus Module
- MKS-8015B 16 Aux Bus Module
- MKS-8017 32 Crosspoint Module
- MKS-8017B 32 Crosspoint Module
- MKS-8018 24 Crosspoint Module
- MKS-8018B 24 Crosspoint Module
- MKS-8019 16 Crosspoint Module
- MKS-8019B 16 Crosspoint Module
- MKS-8020 Standard Transition Module
- MKS-8021 Simple Transition Right Module
- MKS-8022 Simple Transition Left Module
- MKS-8023 Compact Key Transition Module

- MKS-8024 Flexipad Module
- MKS-8025 Memory Card/USB Module
- MKS-8026 10 Keypad Module
- MKS-8027 Compact Transition Right Module
- MKS-8028 Compact Transition Left Module
- MKS-8030 Key Frame Module
- MKS-8031JS Joy Stick Module
- MKS-8031TB Track Ball Module
- MKS-8032 DSK Fader Module
- MKS-8033 Utility/Shotbox Module
- MKS-8034FB FTB Module
- MKS-8034DK DSK/FTB Module
- MKS-8035 Key Control Module
- MKS-8040 Blank Panel
- MKS-8041 Blank Panel
- MKS-8075 Extension Adaptor
- MKS-8076 Memory Card/USB Adaptor

Optional Boards

- MKS-8110SD 17-Input Board (SD)
- BKDS-9162 12-Output Board
- BKDS-9210 Mix/Effect Board
- BKDS-9470 DME Board Set
- MKS-8010 System Control Unit

Optional Software

- BZS-9250 Additional simple PGM/PST function for the DVS-9000 Series switcher system
- BZS-9420 Color Correction Software for the DVS-9000 Series Switcher
- BZPS-8000 System Management Software
- BZPS-8001 Switcher Setup Software

Optional Peripherals

- MKS-8080 Aux Bus Remote Panel
- MKS-8082 Aux Bus Remote Panel
- UCP-8060 Universal Control Panel
- MKS-8700 Device Control Unit
- MKS-8701 Tally/GPI Output Board
- MKS-8702 Serial Interface Board
- HK-PSU04 Power Supply Unit
- HK-PSU03 Backup Power Supply Unit

Not supplied: AC power cord (Part No. 1-557-377-11 (USA and Canada), Part No. 1-782-929-21 (Europe))

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz

Power consumption

DVS-9000SF:

5.5 to 2.5 A

CCP-8000 Series:

3.3 to 1.4 A

CCP-9000 Series:

0.9 to 0.4 A

Device control unit:

1.4 to 0.8 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity:

10% to 90 % (Non-condensing)

Dimensions (W x H x D)

DVS-9000SF:

482 x 177 x 520 mm (19 x 7 x 20 1/2 inches)

CCP-8000 Series

Main Panel

4M/E, 32-crosspoint buttons:

1443 (with mount bracket) x
98.5 x 528 mm (56 7/8 x 4 x 20
7/8 inches)

3M/E, 24-crosspoint buttons:

1291 (with mount bracket) x
98.5 x 528 mm (50 7/8 x 4 x 20
7/8 inches)

2M/E, 16-crosspoint buttons:

1139 (with mount bracket) x
98.5 x 396 mm (44 7/8 x 4 x 15
5/8 inches)

Auxiliary Bus Panel

32-crosspoint buttons:

782 (with mount bracket) x 132
x 80 mm (30 7/8 x 5 1/4 x 3 1/4
inches)

24-crosspoint buttons:

630 (with mount bracket) x 132
x 80 mm (24 7/8 x 5 1/4 x 3 1/4
inches)

16-crosspoint buttons:

478 (with mount bracket) x 132
x 80 mm (18 7/8 x 5 1/4 x 3 1/4
inches)

Menu Panel:

424 x 220 x 46 mm (16 3/4 x 8 3/4
x 1 13/16 inches)

System Control Unit:

482 x 132 x 520 mm (19 x 5 1/4 x
20 1/2 inches)

CCP-9000 Series

Main Panel

2M/E, 12-crosspoint buttons/1M/E,
12-crosspoint buttons:

478 (with mount bracket) x 208
x 442 mm (18 7/8 x 8 1/4 x 17
1/2 inches)

Menu Panel:

424 x 220 x 46 mm (16 3/4 x 8 3/4
x 1 13/16 inches)

Device Control Unit:

482 x 132 x 520 mm (19 x 5 1/4 x 20
1/2 inches)

Memory Card/USB Adaptor:

263 (with mount bracket) x 132 x
78.5 mm (10 3/8 x 5 1/4 x 3 1/8
inches)

Extension Adaptor:

263 (with mount bracket) x 132 x
78.5 mm (10 3/8 x 5 1/4 x 3 1/8
inches)

Mass

DVS-9000SF:

Approx. 25 kg (55 lb 8 oz)

CCP-8000 Series

Main Panel (4M/E, 32-crosspoint
buttons):

30 kg (66 lb 2 oz)

Auxiliary Bus Panel (32-crosspoint
buttons):

3.7 kg (8 lb 2 oz)

Menu Panel:

2.2 kg (4 lb 13 oz)

System Control Unit:

12 kg (26 lb 7 oz)

CCP-9000 Series

Main Panel

2M/E, 12-crosspoint buttons:

12.5 kg (27 lb 9 oz)

1M/E, 12-crosspoint buttons:

11.5 kg (25 lb 6 oz)

Menu Panel:

2.2 kg (4 lb 13 oz)

Device Control Unit:

18 kg (39 lb 10 oz) (Fully loaded)

Memory Card/USB Adaptor:

1.2 kg (2 lb 10 oz) (with module)

Extension Adaptor:

1.5 kg (3 lb 4 oz) (with module)

Video inputs

Primary inputs:

BNC type connector x 1 each,

Max.34

Serial digital video signal,

SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, 270

Mb/s, 75 Ω

Input return loss:

15 dB

Cable length:

200 m (with Belden8281, 5C-2V or
equivalent coaxial cable)

External inputs (Built-in DME):

BNC type connector x 4,

Serial digital video signal,

SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, 270

Mb/s, 75 Ω

Input return loss:

15 dB

Cable length:

200 m (with Belden8281, 5C-2V or
equivalent coaxial cable)

Reference inputs:

BNC type x 2, loop-through, analog

black burst or analog sync

Video outputs

OUT 1 to 24

OUT 1 to 4, 13 to 16:

BNC type connectors x 2 each

Out 5 to 12, 17 to 24:

BNC type connector x 1 each

Serial digital video signal,

SMPTE259M-C, 0.8 Vp-p $\pm 10\%$,

C135270 Mb/s, 75 Ω

MONITOR OUT 1 to 4 (built-in DME

MONITOR OUTPUT):

BNC type connector x 1 each

Serial digital video signal,

SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, 270

Mb/s, 75 Ω

Reference output:

BNC type x 1, analog sync

Control

Control LAN:

RJ-45, 100Base-TX

Data LAN:

RJ-45, 100Base-TX

REMOTE 1 to 4:

D-SUB 9-pin, RS-422A

TERMINAL:

D-SUB 9-pin, RS-232C

GPI:

D-SUB 25-pin, female, relay contact
outputs x 4, open collector outputs x 4

EXTENSION:

BNC type connector x 1

Built-in DME

Control LAN:

RJ-45, 100Base-TX

Data LAN:

RJ-45, 100Base-TX

REMOTE:

D-SUB 9-pin, RS-422A

GPI:

D-SUB 25-pin, female, relay contact
outputs x 4, open collector outputs x
4

CCP-9000 Series

Control LAN:

RJ-45, 100Base-TX

Data LAN:

RJ-45, 100Base-TX

Peripheral LAN:

RJ-45, 100Base-TX

GPI:

D-SUB 25-pin, relay contact outputs
x 4, open collector outputs x 4

Remote:

BNC type, S-BUS

Device:

USB type A

Main Panel:

D-sub 50-pin

Menu Panel:

D-sub 50-pin

Ext Panel:

D-sub 50-pin

Device Control Unit

Peripheral LAN:

RJ-45, 100Base-TX

Serial tally 1 to 2:

D-sub 9-pin, RS-422A

TALLY/GPI inputs:

D-sub 37-pin x3, TTL level inputs x
34 each,

TALLY/GPI outputs *:

D-sub 37-pin, relay contact outputs
18-ch, up to 15 ports in steps of 3
ports in a frame

REMOTE *:

D-sub 9-pin, RS-422A, various
protocols, up to 30 ports in steps of 6
ports in a frame

TALLY/GPI and REMOTE ports are alternatively
installed. Mixed configuration of TALLY/GPI and
REMOTE ports are possible.

MFS-2000 Multi-Format Switcher Processor

The MFS-2000 is a 3RU high compact and low-cost multi-format switcher that is suitable for use in small-scale OB vehicles, production studios and editing suites.

Features

- *High performance compact multi-format switcher
- *Both multi-format and standard definition configurations are supported
- *A standard definition configuration can be upgraded to a multi-format system with minimal cost by upgrading the software
- *Useful preset effect patterns are provided as preset wipes and DME wipe patterns
- *The FlexiPad control panel enables operations such as Macro, M/E and Effect Snapshot
- *Color touch-screen LCD panel
- *Serial and parallel tally outputs
- *Both the control panel and switcher processor can be fitted with redundant power supply units
- *The optional 2-channel DME provides the following stunning effects: 2D/3D linear and nonlinear transforms, Digital SPARKLE, LIGHTING, SHADOW, TRAIL, Digital SKETCH, GLOW, and METAL
- *The optional frame memory can store a remarkable 435 frames of HD images or 2184 frames of SD images
- *Three types of control panels are provided; MKS-2010 1 M/E control panel, MKS-2015 1.5 M/E control panel, and MKS-2017 1.5 M/E wide control panel



Supplied Accessories

AC power cord (1)
Operation manual (1)

Optional Accessories

MKS-2110M Input/Output Connector Board (MFS-2000)
MKS-2440 Frame Memory Board Set (MFS-2000)
MKS-2470 DME Board Set
MKS-2700 Device Control Unit
HK-PSU01 Power Supply Unit
HK-PSU02 Power Supply Unit
HK-PSU11 Power Supply Unit (Control Panel)
MKS-2010 1 M/E Control Panel (MFS-2000)
MKS-2015 1.5 M/E Control Panel (MFS-2000)
MKS-2017 1.5 M/E Wide Control Panel (MFS-2000)

Specifications

General

Power requirements:
AC 100 V to 240 V $\pm 10\%$ 50/60 Hz
Power consumption:
4.5 to 2.1 A (fully loaded)
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature
-20 °C to +60 °C (-4 °F to +140 °F)
Dimensions (W x H x D):
440 x 132.4 x 520 mm
(17 3/8 x 5 1/4 x 20 1/2 inches)
Mass:
22 kg (48 lb 8 oz, fully loaded)

Input/output connectors

Primary inputs:
Max. 16, BNC x 1 each
SMPTE292M (HDTV), SMPTE259-C (SDTV)

SDI video outputs:

Max. 8, BNC x 2 each
SMPTE292M (HDTV), SMPTE259-C (SDTV)

Reference inputs:

BNC x 2, 75 Ω with loop-through
HDTV system: HD tri-level sync, Analog black burst, or analog sync
SDTV system: Analog black burst or analog sync

Reference output:

BNC x 1, 75 Ω
HDTV system: HD tri-level sync
SDTV system: Analog sync

Control signals

Switcher interface:

Control LAN: RJ-45 x 1, 100BASE-TX
Data LAN: RJ-45 x 1, 100BASE-TX

DME interface:

Control LAN: RJ-45 x 1, 100BASE-TX
Data LAN: RJ-45 x 1, 100BASE-TX

GPI:

D-sub 25-pin (female) x 1, TTL level inputs x 8,
Relay contact outputs x 4, Open collector outputs x 4

Tally:

D-sub 25-pin (female) x 1, Relay contact outputs x 4, Open collector outputs x 4

Serial tally:

D-sub 9-pin (female) x 1, RS-422A

AWS-G500 Live Content Producer

Features

The Anycast Station is an all-in-one content creation tool designed for large projection applications such as church productions, product promotions, event and live staging, music clip creation, conferences, seminars, and distance learning *It comprises a high-quality video switcher, an audio mixer, a large LCD display, and a streaming encoder and server - all packed into an attache case size chassis weighing only about 15 lb. (7 kg) *The video switcher provides 4:2:2 8-bit processing, 6 primary inputs plus one still picture source, 1 ME with 1 keyer (selectable between Linear Key/Luminance Key/Chrominance Key) and 1 DSK with 1 fixed station logo *The audio mixer provides 48 kHz/24-bit processing, 6 stereo channel input mixing, 6 channel faders and 1 master fader *High-resolution (1280 x 1024 pixel) internal processing for seamless switching between video and PC sources *Versatile input/output (Input: Composite, S-Video, DV, and RGB/ Output: Composite, S-Video, RGB) *VISCA control functions for compatible Sony Pan/Tilt/Zoom cameras *A large LCD screen for PGM and PVW monitoring, plus 7 windows for input source and one internal still picture source monitoring *Built-in streaming encoder and streaming server function (optional feature) *Easy operation with one integrated control panel and the multi-window LCD *Multi-camera recording for convenient nonlinear editing.



Supplied Accessories

Installation Guide (1)
Pin to BNC Connector (4)

Optional Accessories

BZAW-500 Keyboard / Software Kit
BKAU-550 PC Video Interface Module
BKAU-570 SD Video Interface Module

Specifications

- General -

Model
AWS-G500
Power Requirements
AC 100-240 V, 50/60 Hz
Operating Voltage
AC 90-260 V, 47/63 Hz
Power Consumption
160 W
Operating Temperature
0 to 40 °C (32 to 104 °F)
Dimensions (W x H x D)
424 x 114 x 354 mm
Mass
Approximately 7.0 kg (15 lb 7 oz)

- Video Signals -

VIDEO INPUTS (in exfactory configuration)
Composite
BNC Type x 4
Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video
DIN Type x 4
Y: 1.0 Vp-p, 75 Ω, Sync negative
C: 0.286 Vp-p at burst, 75 Ω (System Mode 59.94 Hz)
C: 0.3 Vp-p at burst, 75 Ω (System Mode 50 Hz)
DV
IEEE 1394 4-pin Type x 4
IEC 61883-2 equiv.

RGB

D-Sub Shrunk 15-pin Type x 2 (Female)
XGA, SXGA

VIDEO OUTPUTS

Composite
BNC Type x 1
Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video
DIN Type x 1
Y: 1.0 Vp-p, 75 Ω, Sync negative
C: 0.286 Vp-p at burst, 75 Ω (59.94 Hz)
C: 0.3 Vp-p at burst, 75 Ω (50 Hz)

RGB

Extended D-Sub 15-pin Type x 2 (Female)
XGA, SXGA

BB OUT

BNC Type x 2
Sync: 0.286 Vp-p, 75 Ω, Sync negative (59.94 Hz)
Sync: 0.3 Vp-p, 75 Ω, Sync negative (50 Hz)
C: 0.286 Vp-p at burst, 75 Ω (59.94 Hz)
C: 0.3 Vp-p at burst, 75 Ω (50 Hz)

Recorder Port

HDD/DV
i.LINK: IEEE 1394 6-pin Type x 2
(in exfactory configuration)
HDD IF: SBP2

- Audio Signals -

AUDIO INPUTS
Analog Inputs 1-2
XLR/TRS Combo Type x 2
Ref. Level: +4 dBu, -20 dBu, -44 dBu
Mic. Power: +48 V
Analog Inputs 3-6
TRS Type x 4 / Ref. Level: +4 dBu, -20 dBu, -44 dBu
Analog Inputs 7-8
Pin x 2 / Ref. Level: -10 dBs

AUDIO OUTPUTS

PGM OUT
TRS Type x 2 / Ref.: +4 dBu / Impedance: 150 Ω
MIX OUT
Pin Type x 2 / Ref.: -10 dBs / Impedance: 10 kΩ
AUX OUT
TRS Type x 2 / Ref.: +4 dBu / Impedance: 150 Ω
MONITOR OUT
TRS Type x 2 / Ref.: +4 dBu / Impedance: 150 Ω
HEADPHONES
1/4 inches Stereo Phone Jack Type x 2
70 mW x 2 / Impedance: 47 Ω
INTERCOM
D-Sub 9-pin Type (Female) / Original Parallel I/O

- Other Interfaces -

NETWORK
RJ-45 Type x 1, 10/100base-TX
USB1.1
USB A Type x 2, USB1.1 equiv.
RGB(GUI)
D-Sub Shrunk 15-pin (Female), 1280 x 800, 60 Hz
REMOTE
D-Sub 9-pin (Male), RS-232C
FACTORY USE
D-Sub 15-pin (Male), Original Parallel I/O
MEMORY STICK
Memory Stick TM Slot
*Memory Stick Pro is not supported.
VISCA
DIN 8-pin Type x1
Supports Sony VISCA camera commands.
LCD
15.4" High Brightness LCD, 1280 x 800, 60 Hz
Speaker
Built-In Speaker x 2, Size: 20 x 40 mm

BKAW-550 PC Video Interface Module

Applicable Models

AWS-G500 Live Content Producer

Specifications

RGB

D-sub Shrunk 15-pin Type x 2 (Female),
XGA, SXGA



BKAW-570 SD Video Interface Module

Applicable Models

AWS-G500 Live Content Producer

Specifications

Composite

BNC Type x 2

Video: 1.0 Vp-p, 75 Ω , Sync negative

S-Video

DIN Type x 2

Y: 1.0 Vp-p, 75 Ω , Sync negative

C: 0.286 Vp-p at burst, 75 Ω , (System
Mode 59.94 Hz)

C: 0.3 Vp-p at burst, 75 Ω , (System Mode
50 Hz)

DV

IEEE 1394 4-pin Type x 2

IEC 61883-2 equiv.

HDD/DV

I.LINK: IEEE 1394 6-pin Type x 2

HDD IF: SBP2



MVE-8000A 234
MVE-9000 235

MVE-8000A Multi-Format DME Processor

The MVE-8000A is a multi-format DME processor for the MVS-8000A Series Multi-Format Production Switcher System with its frame size only 2 RU. The MVE-8000A provides a wide variety of effects such as 2D/3D and linear/non-linear transforms in both HDTV and SDTV video formats, which can be easily switched from switcher control panel without swapping the boards. The MVE-8000A is integrated to the MVS-8000A Series switcher processor via dedicated cables without consuming the SDI inputs and outputs on the switcher processor. In conjunction with the MVE-8000A, the MVS-8000A Series system allows DME- Wipes, Processed Key, and a wide variety of attractive effects, which can be controlled from the control panel as if they were a part of the switcher functions.



Applicable Models

MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Installation Manual (1)
Switcher Video Interface Cable (3 m) (2)

Optional Accessories

MKE-8021A Input/Output Board (SDI)
MKE-8020A MVS Interface Board
MKE-8040A Effects Board (MVE-8000A)
HK-PSU02 Power Supply Unit

Specifications

General

Power requirements:
100 - 240 V \pm 10%, 50/60 Hz
Power consumption:
2.5 to 1.0 A
Dimensions (W/H/D):
440 mm x 87.5 mm x 520 mm (17 3/8 x 3 1/2 x 20 1/2 inches)
(without projection)
Mass:
16 kg (35 lb 4 oz) (fully loaded)
Operation Temperature:
+ 5 °C to + 40 °C (+ 41 °F to + 104 °F)
Operating humidity:
10% to 90% (non-condensing)

Inputs/outputs

MKE-8020A:
MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS
MKE-8021A:
Video inputs-Video/Key: BNC x 8, SDI
Video outputs-Video/Key: BNC x 8, SDI
Monitor outputs: BNC x 4, SDI
Reference:
BNC x 2, 75 Ω with loop-through output
Analog black burst or HD tri-level sync

System interface

Control LAN:
RJ-45 x 1, 100BASE-TX
DATA LAN:
RJ-45 x 1, 100BASE-TX
Editor:
D-sub 9-pin x 4, RS-422A
GPI:
D-sub 25-pin, TTL level inputs x 8,
relay contact outputs x 4, open collector
outputs x 4

MVE-9000 Multi-format DME Processor

The MVE-9000 provides high picture quality and a rich set of features for the creation of stunning special effects in live environments and post-production.

Features

*High-quality DME *HD/SD multi-format capability *HDTV: 1080i/50, 59.94, 60, 1080p/23.976, 24, 25, 29.97, 30, 720p/59.94 *SDTV: 480i/59.94, 576i/50 *A variety of effects *3D Linear/Nonlinear, Sparkle, Input Freeze, Defocus, Key Border, Beveled Edge, Glow, Sketch, Metal, Mask, Light, Shadow, Trail and more *Up to four channels of Combine with Intersect and Dim/Fade *Effect data compatible with the MVE-8000 *Y/C/K 10-bit processing *Field/Frame-based processing *High-performance pixel-based anti-alias filter *High-quality multi-point interpolation *Up to four channels can be configured on a channel basis *One of the following video interface boards can be installed — The MKE-9021M for standalone operations or MKE-9020M for dedicated connection to the MVS Series switcher *4U high, less than 15 kg in weight, and less than 500 W consumed when fully loaded with its option boards *Redundant power supply HK-PSU04 can be installed *Four RS-422 interfaces for control from external editor *Each channel can be independently controlled *GPI and Tally interface *100Base-TX network interfaces allow the transfer of files (image, effect, setup, etc.) between equipment connected to the MVS Data LAN, and real time control via the MVS Control LAN



Applicable Models

MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Installation Manual (1)
75 Ω Terminator (1)
Mounting Bracket (1)
Support Angle (1)
Screw (1)

Optional Accessories

BZDM-9050 Texture Lighting Software

Optional Boards

MKE-9020M MVS Interface Board Set for the MVE-9000
MKE-9021M Input/Output Board Set for the MVE-9000
MKE-9040M Advanced Effects Board for the MVE-9000
HK-PSU04 Power Supply Unit

Specifications

General

Power requirement:
100 V to 240 V \pm 10% 50/60 Hz
Power consumption:
500 VA
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to + 60 °C (-4 °F to + 140 °F)
Operating humidity:
10% to 90% RH
Dimensions (W x H x D):
482 x 194 x 520 mm (19 x 7 3/4 x 20 1/2 inches)

Mass:

Approx. 20 kg (44 lb 1 oz)

Inputs

Video inputs (MKE-9021M)
SDI
Video/Key:
BNC-type connectors x 8
Ext Video IN:
BNC-type connectors x 4
Reference:
BNC type connectors x 2, 75 Ω with loop-through output
Analog black burst or HD tri-level sync

Outputs

Video outputs (MKS-9021M)
SDI
Video/Key:
BNC-type connectors x 8
Monitor Out:
BNC-type connectors x 4
Video inputs/Video outputs (MKE-9020M)
MVS interface:
MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS

Control signals

Control LAN:
RJ-45 x 1, 100Base-TX
Data LAN:
RJ-45 x 1, 100Base-TX
Remote:
D-SUB 9-pin x 4, RS-422
GPI:
D-SUB 25-pin x 2, dry contact or open collector inputs x 16, relay contact outputs x 8, open collector outputs x 8

SONY

DME Switchers

DFS-700AP	238
BKDF-701	239
BKDF-702P	239
BKDF-711	239
BKDF-712	239

DFS-700AP DME Switcher

Features

*Video switcher equipped with powerful digital multi effector
 *Full digital component processing from input to output at 4:2:2:4 (video and key)
 *No need for external A/D converters
 *Incorporates thousands of factory preset effect patterns including non-linear digital effects
 *The perfect companion for Sony digital VTRs and servers
 *Real-time system, capable of delivering effects in an instant
 *Eight standard inputs include four SDI and four analog component
 *Eight standard outputs include two SDI, two analog component, two analog composite, and two Y/C
 *Can be used with Sony BVE-2000 and PVE-500 editors via the serial interface
 *Optional boards are prepared to change the types of inputs (BKDF-701/702)
 *Chroma keyer, Y/U/V color correction, down stream keyer, fade-to-black, and frame memory are included
 *2nd channel DME board prepared as an option (BKDF-711)
 *3D video mapping effects board prepared as an option (BKDF-712)
 *DSK re-position function
 *Different transition rates can be set up for DSK On and Off
 *DSK effects — DSK blink; Border blink; Hue rotation



Supplied Accessories

AC power cord (1)
 25-pin control cable (10 m) (1)

Optional Boards

BKDF-712 3D Video Mapping Effects Board
 BKDF-711 2nd Channel DME Board
 BKDF-702P Analog Composite Input Board (PAL)
 BKDF-701 Digital/Analog Input Board (NTSC/PAL)

Specifications

General

Power requirements:
 AC 220/240 V, 50/60 Hz
 Operating voltage:
 AC 180 to 260 V, 47 to 63 Hz
 Power consumption:
 200 W
 Operating temperature:
 0 to 40 °C (32 to 104 °F)
 Dimensions (W x H x D)
 Control panel:
 440 x 121 x 287 mm
 17 1/4 x 4 3/4 x 11 1/4 inches
 Processor unit:
 440 x 132 x 520 mm
 17 1/4 x 5 1/4 x 20 1/2 inches
 Mass
 Control panel: 3 kg (6 lb 10 oz)
 Processor unit: 14 kg (30 lb 14 oz)

Input signals

VIDEO INPUTS

SDI:
 BNC type x 4
 270 Mb/s

Component

BNC type x 4 (Y/R-Y/B-Y)
 Y: 1.0 Vp-p, 75 Ω, Sync negative
 R-Y/B-Y: 0.525 Vp-p, 75 Ω

DSK KEY IN:

BNC type x 2, Loop-through, 1.0 Vp-p, 75 Ω

REF VIDEO

BNC type x 2, Loop-through connection
 Sync: 0.3 Vp-p
 Burst: 0.3 Vp-p

Output signals

PGM OUT

SDI:

BNC type x 2
 270 Mb/s

Component

BNC type x 2 (Y/R-Y/B-Y)
 Y: 1.0 Vp-p, 75 Ω, Sync negative
 R-Y/B-Y: 0.525 Vp-p, 75 Ω

Composite

BNC type x 2
 Video: 1.0 Vp-p, 75 Ω, Sync negative

S-Video

DIN type x 2 (Y/C)
 Y: 1.0 Vp-p, 75 Ω, Sync negative
 C: 0.3 Vp-p at burst, 75 Ω

CLEAN OUT

BNC type x 1
 SDI: 270 Mb/s

PREVIEW OUT

BNC type x 1, Composite
 Video: 1.0 Vp-p, 75 Ω, Sync negative

BLACK BURST OUT

BNC type x 3
 Sync: 0.3 Vp-p, 75 Ω
 Burst: 0.3 Vp-p, 75 Ω

Signal processing

Sampling rate

Y: 13.5 MHz
 R-Y/B-Y: 6.75 MHz

Quantization

Y/R-Y/B-Y: 8 bits
 Linearity (Composite output)
 DG:

Less than 3.5% (composite input)
 Less than 2% (component, S-Video input)

DP:

Less than 2.5° (composite input)
 Less than 1° (component, S-Video input)

Frequency response:

0 to 5 MHz +0.5 dB/-1 dB

S/N:

More than 50 dB (composite)
 More than 55 dB (component, S-Video)

Y/C delay:

Less than 20 ns (component)
 Less than 50 ns (composite, S-Video)

Control signals

Editor:

D-sub 9-pin x 1, RS-422A

GPI/T:

BNC type x 2, TTL Level

Panel:

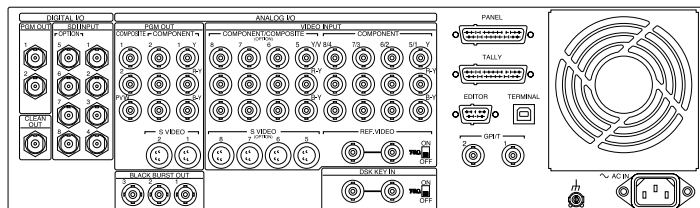
D-sub 25-pin x 1

Tally:

D-sub 25-pin x 1, Relay contact outputs x 8

Terminal:

USB B-type



BKDF-701 Digital/Analog Input Board (NTSC/PAL)

Features

A digital/analog input board for NTSC/PAL for use with
DFS-700/700P DME Switcher

Applicable Models

DFS-700A DME Switcher
DFS-700AP DME Switcher

BKDF-702P Analog Composite Input Board (PAL)

Features

An analog composite input board for PAL for use with
DFS-700P DME switcher

Applicable Models

DFS-700AP DME Switcher

BKDF-711 2nd Channel DME Board

Features

A 2nd channel DME board for use with DFS-700/700P
DME switcher

Applicable Models

DFS-700A DME Switcher
DFS-700AP DME Switcher

BKDF-712 3D Video Mapping Effects Board

Features

A 3D video mapping effects board for use with
DFS-700/700P DME switcher

Applicable Models

DFS-700A DME Switcher
DFS-700AP DME Switcher

SONY

DMW-S05NL	242
DMW-IF01	243
DMW-IF02	243
DMW-RT01	243
DMW-RT02	243
DMW-STA05FC	243
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DMW-C2	244
DMW-C3	244
DMW-C4	244
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DMW-S05NL Non-Linear Production System (MPEG IMX based model)

XPRI is Sony's scalable high end non-linear editing system capable of editing multiple video formats and resolutions. Delivered as a dual processor windows workstation, XPRI combines the openness of working with a standard IT platform and the power of dedicated video processing hardware.

Every XPRI can edit a multiple of standard definition formats. These include uncompressed 601, native IMX 30, 40, and 50 Mbps MPEG.

With the latest software, XPRI is able to edit proxy files created on the XDCAM optical disc. These files are imported at up to 30 times realtime shattering current workflow restrictions.

By simply adding additional hardware boards the XPRI workstation can then process High Definition video. Uniquely Xpri can edit HDCAM material in its native format maintaining absolute picture quality throughout the post production process. Another advantage of processing native HDcam material is the fact that storage requirements are very low.

The AV hard discs which are supplied with the XPRI can store up to 8 hours of HDCAM material and all HDCAM editing is carried out in realtime..

By expanding the XPRI storage HD material can also be stored and edit uncompressed HD material. XPRI edits all material at a resolution of 1920 x 1080 and a huge range of frame rates are supported including 24p, 25p,29,97p, 30p, 50i, 60i and 59.94i.

As you would expect from Sony, the picture processing is the very best, every realtime FX is processed using 12bit accuracy and non realtime FX up to 32bit. XPRI can process up to two realtime HD streams both with a primary or secondary colour correction, a 3DVE and a title. When the user goes beyond the realtime capabilities the optional render farm and be added which allows up to 10 dedicated workstations to process FX in the background.

The XPRI user interface will appear very familiar to editors of established systems such as Avid and Linear editors will benefit from the array of hardware control interfaces such as jog/shuttle control, the audio faders and the trackball for controlling DVE's



VTR, displays and speakers are not included DMW-S05NL.

Supplied Accessories

Digital Media Workstation (1)
Editing Software (1)
Installation manual (1)
Operational Manual (PDF) (1)
Rackmount Kit (1)
AC Cable (1)

Optional Panels

DMW-C1 Media Control Bar
DMW-C2 Jog And Shuttle
DMW-C3 Audio Control unit
DMW-C4 TrackBall Control unit
DMW-C5 Linear like edit controller

Optional Boards

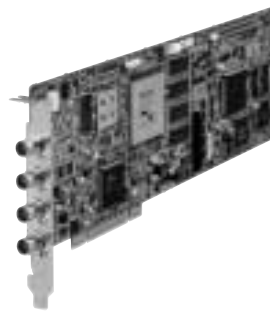
DMW-IF01 SDTI Interface Board
DMW-IF02 HDTV Interface Board
DMW-RT01 Real-time Video Processing Board-SD Only
DMW-RT02 Real-time Video Processing Board-SD and HD
DMW-STA05FC Dual Channel FC Expansion Board

Optional Peripherals

DMW-EX01 TC/GPI Interface Unit
DMW-EX02 9 Pin Remote Interface Unit
DMW-ST07308 Xpri Fc Storage, 73gb X 8, 16 Slot
DMW-ST14608 Xpri Fc Storage, 146gb X 8, 16 Slot
DMW-ST14616 Xpri Fc Storage, 146gb X 16, 16 Slot

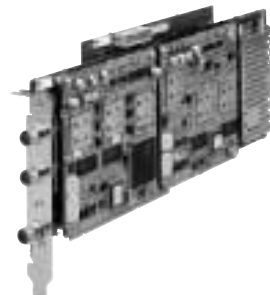
DMW-IF01 SDTI Interface Board

The SDTI board allows the Standard definition XPRI to natively ingest IMX based material natively. Additionally when connected to the correct IMX VTR this can be carried out at twice real-time saving valuable digitising time. This option also allows HDCAM material Natively on a HD enabled XPRI removing any generation loss in the picture.



DMW-IF02 HDTV Interface Board

This board upgrades the SD XPRI to HD and supports both HDCAM native and HD uncompressed codecs. Once fitted the XPRI can edit both SD and HD projects on the same workstation



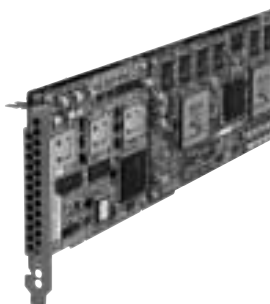
DMW-RT01 Real-time Video Processing Board-SD Only

The real-time FX board for a SD XPRI workstation. It adds real-time 3DVE's, advanced colour correction and advanced keying. This board can be upgraded to the DMW RT-02 real-time HD FX board but using the DMW-RT01UPK option



DMW-RT02 Real-time Video Processing Board-SD and HD

Provides exactly the same real-time capabilities as the DMW-RT01 but adds HDCAM native support.



DMW-STA05FC Dual Channel FC Expansion Board

This dual channel 2GBFibre Channel card is used to connect to the XPRI external storage units. It can also be used to connect to the XPRI SAN.

DMW-C1 Media Bar Option For XPRI Workstation

This hardware interface can be used to control audio levels, EQ levels, Colour correction parameters and DVE placement.



DMW-C2 Jog / Shuttle Control

The Jog/Shuttle can be used to control both VTR's connected to the XPRI as well as the XPRI clip and timeline editors.



DMW-C3 Audio Fader For Xpri

This motorised audio panel is used primarily to control audio levels and audio routing. It can both "read" and "write" to the timeline.



DMW-C4 DMW-C4 Trackball

The trackball option can interface with both the DVE FX editor and the advanced colour correctors.



DMW-C5 Linear Like control panel for

The C5 is a linear like edit controller which is optimised to replace many traditional mouse and keyboard shortcuts.



DMW-EX01 TC/GPI Interface Unit

This can be used to accept both external timecode feeds and provide GPI triggers that are marked on the XPRI timeline.



DMW-EX02 9 Pin Remote Interface Unit

This external option allows the XPRI to be remotely controlled via RS422.



DMW-ST07308 Xpri Fc Storage, 73gb X 8, 16 Slot

This 19" Rackmount storage enclosure comes with 8* 73GB FC SCSI drives. An additional 8 drives can be added at a later date. This storage system can support all resolutions and codecs right up to HD. Please note that HD uncompressed requires the subsystem to be fully loaded with 16 drives. Multiple units can be "Daisy chained"

DMW-ST14608 Xpri Fc Storage, 146gb X 8, 16 Slot

This 19" Rackmount storage enclosure comes with 8* 146GB FC SCSI drives. An additional 8 drives can be added at a later date. This storage system can support all resolutions and codecs right up to HD. Please note that HD uncompressed requires the subsystem to be fully loaded with 16 drives. Multiple units can be "Daisy chained"

DMW-ST14616 Xpri Fc Storage, 146gb X 16, 16 Slot

This 19" Rackmount storage enclosure comes with 16* 146GB FC SCSI drives. This storage system can support all resolutions and codecs right up to HD including HD uncompressed. Multiple units can be "Daisy chained"

DMW-DISK73G Additional Disc For Xpri Fc

This is a single 73GB FC SCSI drive for the DMW-ST07308

DMW-DISK146G Additional Disc For Xpri Fc

This is a single 73GB FC SCSI drive for the DMW-ST14608

DMW-NR01 Network Rendering Use Licence

This rendering licence supports dual processor render farms. Rendering times are greatly reduced and take place in the background. Up to 10 licences can be added to the XPRI and each licence lasts 1 year.

PS.XPRI.1XX.1 1yr PrimeSupport for XPRI

This 1 year PrimeSupport “silver” contract provides a number of key services including access to advanced replacement parts and a dedicate support line. The contract can be upgraded locally to a bespoke “Gold” contract.

SONY

Editor/DME/Switcher Accessories

BKDS-9160	250	MKS-8027	270
BKDS-9161	250	MKS-8028	271
BKDS-9162	250	MKS-8030	271
BKDS-9210	250	MKS-8031JS	272
BKDS-9470	251	MKS-8031TB	272
BKE-2010	251	MKS-8032	273
BKE-2011	251	MKS-8033	273
BKE-2020	252	MKS-8034DK	274
BKE-2031	252	MKS-8034FB	274
BVE-2000	252	MKS-8035	275
BZDM-9050	253	MKS-8040	275
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BZS-9250	256	MKS-8080	277
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MKE-8020A	258	MKS-8111M	279
MKE-8021A	258	MKS-8111SD	279
MKE-8040A	258	MKS-8160A	279
MKS-2010	259	MKS-8161M	279
MKS-2015	260	MKS-8162A	280
MKS-2017	261	MKS-8170M	280
MKS-2050	262	MKS-8210A	280
MKS-2110M	262	MKS-8440A	281
MKS-2440	262	MKS-8440SD	281
MKS-2470	263	MKS-8700	282
MKS-2700	263	MKS-8701	282
MKS-8010A	264	MKS-8702	283
MKS-8011	264	MKS-9011A	284
MKS-8013	265	MKS-9012A	285
MKS-8014	265	SWC-5002	286
MKS-8015	266	SWC-5005	286
MKS-8017	266	SWC-5010	286
MKS-8018	267		
MKS-8019	267		
MKS-8020	268		
MKS-8024	269		
MKS-8025MS	269		
MKS-8026	270		

BKDS-9160 24-Output Board

The BKDS-9160 adds 24 outputs to the 24 outputs standard on the DVS-9000, making the total number of outputs 48.

Applicable Models

DVS-9000 Production Switcher Processor

BKDS-9161 8 Monitor Output Board

The BKDS-9161 is an optional SD SDI output board. With this option fitted, the DVS-9000 switcher processor offers eight re-clocked outputs to which the primary input signals can be routed with minimum delay. Those outputs are useful to monitor every primary input signal or to re-entry the primary input signals through the external processors such as color correctors.

NOTE: Unlike the BKDS-9160, those monitor outputs cannot handle the processed signals.

Applicable Models

DVS-9000 Production Switcher Processor

BKDS-9162 12-Output Board

The BKDS-9162 adds 12 outputs to the 12 outputs standard on the DVS-9000SF, making the total number of outputs 24.

Applicable Models

DVS-9000SF Production Switcher Processor

BKDS-9210 Mix/Effect Board

The BKDS-9210 is an optional mix/effects board set. With this option installed, the DVS-9000 is expandable from two to four M/Es, and the DVS-9000SF is expandable from one to two M/Es

Applicable Models

DVS-9000 Production Switcher Processor

DVS-9000SF Production Switcher Processor

BKDS-9470 DME Board Set

By installing the BKDS-9470, the DVS-9000 Series Switcher processors offer four channels of high-quality DME.

Features

*4 DME channels *Video, Key and SDI external video inputs per channel *External video input for use as the background or border/trail source *The four SDI monitor outputs allow monitoring of the video with graphic, the video without graphic, or the key *Y/C/K 10-bit processing *High-performance pixel-based anti-alias filter *8 x 8 multi-point interpolation *Frame base processing *2D, 3D and non-linear effects *Digital SKETCH, Digital SPARKLE, Color Corrector and up to four channels of Intersect Combine *Powerful lighting effects

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor

Optional Accessories

BZS-9471 Texture Lighting Software

BKE-2010 Editing Keyboard

Editing keyboard for BVE-2000

BKE-2011 Editing Keyboard

Qwerty-type editing keyboard for BVE-2000

BKE-2020 Expanded RS-422A Interface Board

Expanded RS-422A interface board for BVE-2000

BKE-2031 PAL Color Framing Detector Board

PAL color framing detector board for BVE-2000

BVE-2000 Editing Control unit

Features

*Maximum six VTRs can be controlled in A/B roll editing
 *Three auxiliary sources *Powerful switcher interface via serial and parallel sources *Fader, wipes, dissolves, keyer and DSK control *Save/recall of initial panel settings for the DVS-2000C, BVS-3000 series, DFS-300/500/700, and GVG-100 switchers *Control of E-File/E-MEM/Snapshot WRITE/READ functions of DVS-2000C, BVS-3000 series, DFS-300/500/700 and GVG-100 *Monitor switcher control
 *Four audio channel control *PCM-7030/7050 audio memory control capability *List management facility:
 1)INSERT, DELETE, MOVE, COPY, CORRECT, SORT, MODIFY, and CLEAN UP functions 2)RIPPLE function 3)998 event memory capacity *Built-in 3.5-inch floppy disc drive *Any combination of LTC, VITC and CTL editing
 *Discontinuous time code source can be handled *20 user programmable keys *Automatic time tracking allows automatic calculation of the player matched frame
 *ACTION TRACK, SCROLL TRACK, PLAYER TRACK, RECORDER TRACK operation possible *Advanced graphic effect mode display *Two recorder operation capability *Temporary recorder assignment possible
 *Synchronization accuracy selection provides synchronization using various time code grades, or no time code at all.



Specifications

Power requirements:
 AC 100 to 240 V, $\pm 10\%$ 48 to 64 Hz
 Power consumption:
 28 W max, including all BKE boards
 Operating temperature:
 0 to 35 °C (32 to 95 °F)
 Storage temperature:
 -40 to 60 °C (-40 to 140 °F)
 Dimensions
 Processor:
 390(W) x 93(H) x 265(D)mm
 (16 3/4 x 5 1/4 x 13 7/8 inches)
 Keyboard:
 424(W) x 65(H) x 258(D)mm
 (16 3/4 x 2 5/8 x 10 1/4 inches)

Mass:

Processor:
 11 kg (25 lb 4 oz)
 Keyboard:
 2.3 kg (5 lb 1 oz)
 Editing reference:
 CTL, RTC, SMPTE/EBU Time Code
 Editing accuracy:
 ± 0 frame with time code
 Memory capacity:
 998 events
 VTR interface:
 RS-422A 9-pin remote connector
 Switcher interface:
 RS-422A 9-pin remote connector
 Mixer interface:

9-pin/15-pin serial/parallel connectors

GPI:
 8 ports, programmable pulse output
 External edit control:
 2 x RS-232C programmable BAUD rate and bit
 Video and reference signal:
 External sync input -0.2 to 5.0 Vp-p 1.0 ± 0.2 Vp-p video signal, 75 Ω
 Reference video input:
 -0.1 ± 0.2 Vp-p, 75 Ω
 (when BKE-2030/2031 fitted)
 VDU output 1.0 V ± 0.3 Vp-p 75 Ω

Supplied Accessories

Maintenance manual (1)
 User's guide (1)
 Operation manual (1)
 25-pin D-sub male (1)
 Rack mount screws (1)
 AC power cord (1)

Optional Accessories

BKE-2010 Editing Keyboard
 BKE-2011 Editing Keyboard
 BKE-2020 Expanded RS-422A Interface Board
 BKE-2030 NTSC Color Framing Detector Board
 BKE-2031 PAL Color Framing Detector Board

BZDM-9050 Texture Lighting Software

Texture Lighting Software for the Sony Multi-format DME processor MVE-9000

Features

The BZDM-9050 is Texture Lighting Software for use with the MVE-9000 Multi-format DME processor. Its texture lighting function enables you to map a texture pattern onto a DME effect using the spotlight function. The Real Lighting Function can add more realistic lighting to several Non-linear effect patterns. Up to four light sources are available per DME channel. With its Test Sphere Function, the position and brightness of light sources can be confirmed with ease.

*V3.0 or later software is required in the MVE-9000 to install the BZDM-9050 Texture Lighting Software.

Applicable Models

MVE-9000 Multi-format DME Processor

BZPS-8000 System Management Software

The BZPS-8000 running on a PC enables integrated management of all Sony live production products configured around and networked to the MVS/DVS Series Switchers. A software package for client and server PC.

Features

- *System data backup/restore — Setups, effects, images, etc. for MVS/DVS, PFV-SP and Router can be backup and restored at a time. Multiple system data can be handled easily per On-air program, per Event, per Operating clue, etc.
- *File server — Individual file transfer control. File accessing from MVS/DVS panel.
- *Status Monitoring/SNMP IF — System status (detected error per equipment) can be displayed on status menu. Convert MVS/DVS status to SNMP for Maintenance Manager.
- *Server and Client — Server function is fundamental part: Gateway, File Server, SNMP IF, etc. Client function is user interface to operate System manager functions
- *Launcher — There will be some plug-in application software available: MVS/DVS Setup, PFV-SP Setup, Router Setup, etc.

Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

The required PC specifications for System Manager Server and Client as follows

Server PC

Model:
 Dell PowerEdge 350
 CPU:
 Celeron® 850 MHz or greater
 HDD:
 40 GB or more
 Memory:
 512 MB or more
 OS:
 Red Hat Linux 7.2
 * At the initial setup of PC, VGA Display and PS/2 Keyboard will be required. However, these are no longer required after the initial setup. RS-232C remote access from the other PC can update the software.
 * Dell PC Model is current and may be replaced with successor sooner or later. So, we will keep you updated if some changes happen.

Client PC

CPU:
 1 GHz or faster
 Memory:
 256 MB or more
 Ethernet:
 100Base-Tx
 OS:
 Windows 2000 Professional
 * The target schedule to support Windows XP will be informed later.

BZPS-8001 Switcher Setup Software

The BZPS-8001 for a client PC of the System Manager allows remote setup and control of MVS/DVS Series switchers. A software package for online software and offline software for a client PC.

Features

*Online — Setup MVS/DVS panel menu can be operated on PC remotely (online). *Offline Setup — MVS/DVS setup can be created on PC anytime/anywhere (offline). Source assignment, name settings, etc. on Windows circumstance. *Remote Diagnosis — Remotely control MVS/DVS diagnosis.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

BZS-8050 Editing Control Software (MVS-8000A, DVS-9000, MFS-2000)

The BZS-8050 Editing Control Software adds editing functions to the MVS-8000A series, the DVS-9000 series, and MFS-2000 production switcher systems. The BZS-8050 requires to be installed to the MKS-8010A System Control Unit, the MKS-2010, the MKS-2015, or the MKS-2017 Control Panels. The MKS-8050 or the MKS-2050 Editing Keyboard is required.

Applicable Models

MKS-2050 Editing Keyboard (MVS-8000A,
DVS-9000, MFS-2000)
MKS-8050 Editing Keyboard (MVS-8000A,
DVS-9000, MFS-2000)

BZPS-8250 Simple p/p software

Additional simple PGM/PST function for the MVS-8000A Series switcher system

The BZS-8250 software allows the addition of a simple PGM/PST function to the MVS-8000A Series Switcher system to configure it as a 1.5/2.5/3.5 M/E system.

It can also be used to add two DSKs but without the simple PGM/PST function.

*Offers a simple PGM/PST function; BKGD A/B buses, two simple DSK and FTB *Provides transition type; CUT, MIX, WIPE, SUPER MIX, NAM and PRESET COLOR MIX *Provides Transition Preview function *DSK supports Luminance Key and Linear Key *DSK provides modifiers such as CLEAN MODE, KEY EDGE POSITION, INVERT, SHOW KEY, AUTO/SELF/SPLIT mode *FTB (FADE TO BLACK) function *Memory system for WIPE SNAPSHOT, KEY SNAPSHOT, SNAPSHOT, EFFECT *Controlled from PGM/PST control area on the CCP-8000/9000 Series control panel *When the BZS-8250 is used to add DSKs (DSK Mode), the additional DSKs are operated from MKS-8034DK or MKS-8032

Applicable Models

MVS-8000SF Multi-Format Switcher Processor

MVS-8000 Multi-Format Switcher Processor

BZS-9250 Simple p/p software

Additional simple PGM/PST function for the DVS-9000 Series switcher system.

The BZS-9250 software allows the addition of a simple PGM/PST function to the DVS-9000 Series Switcher system to configure it as a 1.5/2.5/3.5 M/E system.

It can also be used to add two DSKs but without the simple PGM/PST function.

*Offers a simple PGM/PST function; BKGD A/B buses, two simple DSK and FTB *Provides transition type; CUT, MIX, WIPE, SUPER MIX, NAM and PRESET COLOR MIX *Provides Transition Preview function *DSK supports Luminance Key and Linear Key *DSK provides modifiers such as CLEAN MODE, KEY EDGE POSITION, INVERT, SHOW KEY, AUTO/SELF/SPLIT mode *FTB (FADE TO BLACK) function *Memory system for WIPE SNAPSHOT, KEY SNAPSHOT, SNAPSHOT, EFFECT *Controlled from PGM/PST control area on the CCP-8000/9000 Series control panel *When the BZS-9250 is used to add DSKs (DSK Mode), the additional DSKs are operated from MKS-8034DK or MKS-8032

Applicable Models

DVS-9000SF Production Switcher Processor

DVS-9000 Production Switcher Processor

BZS-9471 Texture Lighting Software

Texture Lighting Software for the Sony DME board set
BKDS-9470

Features

The BZS-9471 is Texture Lighting Software for use with the BKDS-9470 DME board installed in the DVS-9000 Production switcher processor. Its texture lighting function enables you to map a texture pattern onto a DME effect using the spotlight function. The Real Lighting Function can add more realistic lighting to several Non-linear effect patterns. Up to four light sources are available per DME channel. With its Test Sphere Function, the position and brightness of light sources can be confirmed with ease.

*V3.0 or later software is required in the BKDS-9470 to install the BZS-9471 Texture Lighting Software.

Applicable Models

BKDS-9470 DME Board Set

HK-PSU02 Power Supply Unit

Redundant power supply unit for the MFS-2000 Multi
Format Switcher Processor and MKS-8010A System
Control Unit

Applicable Models

MFS-2000 Multi-Format Switcher Processor
MKS-8010A System Control Unit
MVE-8000A Multi-Format DME Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher
Processor

Supplied Accessories

Installation Guide (1) (1)

Specifications

General

Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (- 4 to 140 °F)
Operating humidity:
10% to 90% (nocondensation)

HK-PSU11 Power Supply Unit (Control Panel)

Redundant power supply unit for Control Panel Unit that
can be used as second power supply unit for the
MKS-2010, MKS-2015, and MKS-2017 Control Panels.

Applicable Models

MFS-2000 Multi-Format Switcher Processor
MKS-2010 1 M/E Control Panel (MFS-2000)
MKS-2015 1.5 M/E Control Panel (MFS-2000)
MKS-2017 1 .5 M/E Wide Control Panel
(MFS-2000)

Supplied Accessories

Installation Guide (1) (1)

Specifications

General

Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (- 4 to 140 °F)
Operating humidity:
10% to 90% (nocondensation)

MKE-8020A MVS Interface Board

The MKE-8020A is an optional board for the MVE-8000A Multi Format DME Processor. The MVE-8000A requires the MKE-8020A as an interface board to the MVS-8000A series production switcher system.

Applicable Models	Specifications
MVE-8000A Multi-Format DME Processor	Video inputs/Video outputs
MVS-8000A Multi-Format Switcher Processor	MVS interface:
MVS-8000ASF Multi-Format Switcher Processor	MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS
Supplied Accessories	
Operation Manual (1)	
Dedicated Interface Cable (2)	
Installation Guide (1)	

MKE-8021A Input/Output Board (SDI)

The MKE-8021A is an optional board for the MVE-8000A Multi Format DME Processor. The MKE-8021A has input and output connectors for SDI signals and BNC connectors for monitoring.

Applicable Models	Specifications
MVE-8000A Multi-Format DME Processor	Video inputs
MVS-8000A Multi-Format Switcher Processor	Video/Key: BNC connector x 8, SDI
MVS-8000ASF Multi-Format Switcher Processor	Video outputs
	Video/Key: BNC connector x 8, SDI
	Monitor outputs:
	BNC connector x 4, SDI
Supplied Accessories	
Operation Manual (1)	
Installation Guide (1)	

MKE-8040A Effects Board (MVE-8000A)

The MKE-8040A Effects Board provides excellent 2-channel effects to the MVE-8000A Multi Format DME Processor. The MKE-8040A provides the following stunning effects: Beveled Edge, Glow, Digital SKETCH., Metal, and Mask. Its multi-format capabilities make it suited to both content creation in high-end production and post-production. The MKE-8040A comprises a single board.

Applicable Models
MVE-8000A Multi-Format DME Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

MKS-2010 1 M/E Control Panel (MFS-2000)

The MKS-2010 is a compact 1 M/E Control Panel which is 19 inches in width and offers 12-crosspoint buttons. Its FlexiPad control panel is equipped with color LCD buttons that indicate assigned functions to give users extremely intuitive operation. An easy-to-use color touch-screen LCD panel provides users with effective and straightforward menu control.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Optional Accessories

HK-PSU11 Power Supply Unit (Control Panel)

Specifications

General

Power consumption:

1.0 to 0.5 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operation humidity:

10% to 90% RH

Dimensions (W x H x D):

440 x 167.5 x 353.9 mm (17 3/8 x 6 5/8 x 14 inches)

Mass:

10.3 kg (22 lb 11 oz)

Input/output connectors

Reference inputs

BNC connector x 2, 75Ω with

loop-through

HDTV system: HD tri-level sync, Analog

black burst, or analog sync

SDTV system: Analog black burst or

analog sync

Ext display output:

Mini D-sub 15-pin x 1, Analog RGB interface

Control signals

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Device:

USB type A x 1, compliance with USB 1.1

Remote:

BNC connector x 1, S-BUS

GPI:

D-sub 25-pin (female) x 1, TTL level

inputs x 8, Relay contact outputs x 4,

Open collector outputs x 4



MKS-2015 1.5 M/E Control Panel (MFS-2000)

The MKS-2015 is a compact 1.5 M/E Control Panel which is 19 inches in width and offers 12-crosspoint buttons. Its FlexiPad control panel is equipped with color LCD buttons that indicate assigned functions to give users extremely intuitive operation. An easy-to-use color touch-screen LCD panel provides users with effective and straightforward menu control.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Optional Accessories

HK-PSU11 Power Supply Unit (Control Panel)

Specifications

General

Power consumption:

1.0 to 0.5 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operation humidity:

10% to 90% RH

Dimensions (W x H x D):

440 x 167.5 x 448.1 mm (17 3/8 x 6 5/8 x 17 3/4 inches)

Mass:

11.3 kg (24 lb 15 oz)

Input/output connectors

Reference inputs

BNC type x 2, 75Ω with loop-through

HDTV system: HD tri-level sync, Analog black burst, or analog sync

SDTV system: Analog black burst or analog sync

Ext display output:

Mini D-sub 15-pin x 1, Analog RGB interface

Control signals

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Device:

USB type A x 1, compliance with USB 1.1

Remote:

BNC connector x 1, S-BUS

GPI:

D-sub 25-pin (female) x 1, TTL level

inputs x 8, Relay contact outputs x 4,

Open collector outputs x 4



MKS-2017 1.5 M/E Wide Control Panel (MFS-2000)

The MKS-2017 is a compact 1.5 M/E Wide Control Panel which is 576-mm width and offers 20-crosspoint buttons. Its FlexiPad control panel is equipped with color LCD buttons that indicate assigned functions to give users extremely intuitive operation. An easy-to-use color touch-screen LCD panel provides users with effective and straightforward menu control.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Optional Accessories

HK-PSU11 Power Supply Unit (Control Panel)

Specifications

General

Power consumption:

1.0 to 0.6 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operation humidity:

10% to 90% RH

Dimensions (W x H x D):

576 x 167.5 x 448.1 mm (22 3/4 x 6 5/8 x 17 3/4 inches)

Mass:

12.6 kg (27 lb 12 oz)

Input/output connectors

Reference inputs

BNC type x 2, 75Ω with loop-through

HDTV system: HD tri-level sync, Analog black burst, or analog sync

SDTV system: Analog black burst or analog sync

Ext display output:

Mini D-sub 15-pin x 1, Analog RGB interface

Control signals

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Device:

USB type A x 1, compliance with USB 1.1

Remote:

BNC connector x 1, S-BUS

GPI:

D-sub 25-pin (female) x 1, TTL level inputs x 8, Relay contact outputs x 4, Open collector outputs x 4



MKS-2050 Editing Keyboard (MVS-8000A, DVS-9000, MFS-2000)

The MKS-2050 Editing Keyboard adds editing functions to the MVS-8000A series, the DVS-9000 series, and MFS-2000 production switcher systems by connecting the MKS-2050 to the MKS-8010A System Control Unit, the MKS-2010, the MKS-2015, or the MKS-2017 Control Panels. The MKS-8010A, the MKS-2010, the MKS-2015, and the MKS-2017 require the BZS-8050 Editing Control Software to be installed.

Supplied Accessories
User Guide (1)
15-pin 10m cable (1)

Optional Accessories
BZS-8050 Editing Control Software
(MVS-8000A, DVS-9000, MFS-2000)

MKS-2110M Input/Output Connector Board (MFS-2000)

The optional MKS-2110M Input/Output Connector Board provides 8 SDI input connectors and 4 SDI output connectors to the MFS-2000 Series Multi-Format Switchers.

Applicable Models
MFS-2000 Multi-Format Switcher Processor

Specifications
Input/output connectors
SDI video inputs:
Max.8, BNC connector x1 each
SMPTE292M(HDTV), SMPTE259-C(SDTV)
SDI video outputs:
Max.4, BNC connector x2 each
SMPTE292M(HDTV), SMPTE259-C(SDTV)

MKS-2440 Frame Memory Board Set (MFS-2000)

The MKS-2440 Frame Memory Board Set provides powerful 6-channel frame memory with animation capability to the MFS-2000 Series Multi-Format Switchers. The MKS-2440 offers two channel-source busses and six channel outputs with re-position capability. The frame memory stores 435 frames of HD images which translates into approximately 15 seconds at 1080/59.94i, or 2184 frames of SD images which translates into approximately 73 seconds at 480i/59.94.

Applicable Models
MFS-2000 Multi-Format Switcher Processor

Specifications
Control signals
Image file LAN:
RJ-45 x 1, 100BASE-TX
Device:
IEEE1394 6-pin x 1

MKS-2470 DME Board Set

The MKS-2470 DME Board Set provides state-of-the-art integrated 2-channel effects as preset DME patterns to the MFS-2000 Series Multi-Format Switchers. The MKS-2470 provides the following stunning effects: 2D/3D linear and nonlinear transforms, Digital SPARKLE, LIGHTING, SHADOW, TRAIL, Digital SKETCH, GLOW, and METAL.

Applicable Models
MFS-2000 Multi-Format Switcher Processor

MKS-2700 Device Control Unit

The MKS-2700 Device Control Unit is a compact Device Control Unit for the MVS-8000A series, the DVS-9000 series, and the MFS-2000 production switcher system with its size 1RU. Redundant power supply is supported by using the optional HK-PSU01 Power Supply Unit. The MKS-2700 is suitable for small-scale systems with affordable price.



Applicable Models
MFS-2000 Multi-Format Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Optional Accessories
HK-PSU01 Power Supply Unit

Specifications

General

- Power consumption:
0.7 to 0.5 A
- Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
- Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)
- Operation humidity:
10% to 90% RH
- Dimensions (W x H x D):
440 x 43.6 x 520 mm (17 3/8 x 1 3/4 x 20 1/2 inches)
- Mass:
9.8 kg (21 lb 10 oz)

Control signals

- Peripheral LAN:
RJ-45 x 1, 100BASE-TX
- TALLY/GPI inputs:
D-sub 37-pin x 1, TTL level inputs x 34
- TALLY/GPI outputs:
D-sub 37-pin x 2, TTL level inputs x 18 each
- REMOTE:
D-sub 9-pin x 6, RS-422A, various protocols

MKS-8010A System Control Unit

The MKS-8010A System Control Unit works as the central control over the CCP-8000Series Center Control Panel. The system control unit provides control functions for the center control panel, supplies power to various panel modules, and stores the whole setup data, effects data, snapshot data and still images.



Features

*The MKS-8010A is a compact system control unit with its size compact 1RU
*Redundant power supply is supported by using the optional HK-PSU02 Power Supply Unit

Optional Accessories

HK-PSU02 Power Supply Unit
SWC-5002 Control Panel Cable
SWC-5005 Control Panel Cable
SWC-5010 Control Panel Cable
MKS-8075 Extension Adaptor
MKS-8076 Memory Card/USB Adaptor

Mass:
11.5 kg (25 lb 6 oz)
Operating temperature:
5 to 40 °C (41to +104°F)
Operating humidity:
10% to 90% (Non-condensing)

Inputs

Reference Input:
BNC connector x 2, Loop-through
HD Tri-level Sync (HDTV only) or Analog
Black Burst or Sync

System interface

Control LAN:
RJ-45, 100BASE-TX
Data LAN:
RJ-45, 100BASE-TX
Peripheral LAN:
RJ-45, 100BASE-TX

GPI:
D-sub 25-pin, TTL level inputs x 8 /
relay contact outputs x 4 /
open collector outputs x 4
Remote:
BNC connector x 1, S-BUS
LTC:
BNC connector x 1
Device:
USB Type A

Specifications

General

Power requirements:
100 to 240 V AC +/- 10%, 50/60 Hz
Power consumption:
Max. 250 W (incl. Center Control Panel,
Aux Panel and Menu Panel)
Dimensions (W x H x D, without projection):
440 x 43.6 x 520 mm (17 3/8 x 1 3/4 x
20 1/2 inches)

MKS-8011 Menu Panel

A menu panel is used to select different types of effects, such as transitions, keys, wipes, DME (digital multi effect) functions, etc. and to set up the operational mode and the system setting of peripherals. A 10.4-inch, touch-sensitive color LCD screen is adopted for the menu panel to give intuitive and speedy operation.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

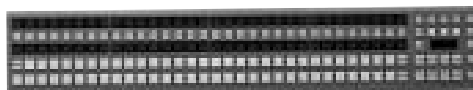
Specifications

General

Dimensions (W x H):
424 x 220 mm (5 RU) (16 3/4 x 8 3/4
inches)

MKS-8013 32 Aux Bus Module

The auxiliary module is used to select sources for monitoring and recording, and also to select material to the frame memory and DME. By changing their operational mode, these buses can then select the destinations and sources of a routing switcher. Each auxiliary bus has two crosspoint button rows, the allocation of which can be set independently. For instance, the DME video can be on the upper row and the DME key on the lower row, alternatively both Shifted and Non-shifted sources can be displayed at the same time.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

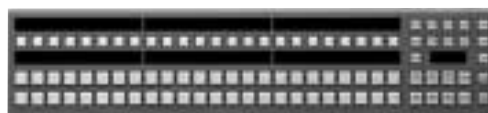
Specifications

General

Dimensions (W x H):
750 x 132 mm (3 RU) (29 5/8 x 5 1/4 inches)

MKS-8014 24 Aux Bus Module

The auxiliary bus module is used to select sources for monitoring and recording, and also to select material to the frame memory and DME. By changing their operational mode, these buses can then select the destinations and sources of a routing switcher. Each auxiliary bus has two crosspoint button rows, the allocation of which can be set independently. For instance, the DME video can be on the upper row and the DME key on the lower row, alternatively both Shifted and Non-shifted sources can be displayed at the same time.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

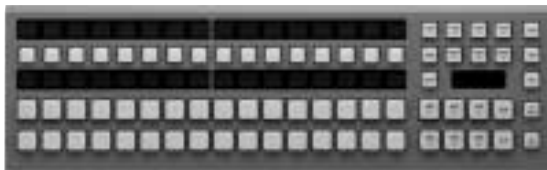
Specifications

General

Dimensions (W x H):
598 x 132 mm (3 RU) (23 1/2 x 5 1/4 inches)

MKS-8015 16 Aux Bus Module

The auxiliary bus module is used to select sources for monitoring and recording, and also to select material to the frame memory and DME. By changing their operational mode, these buses can then select the destinations and sources of a routing switcher. Each auxiliary bus has two crosspoint button rows, the allocation of which can be set independently. For instance, the DME video can be on the upper row and the DME key on the lower row, alternatively both Shifted and Non-shifted sources can be displayed at the same time.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

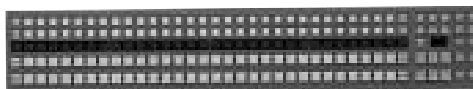
General

Dimensions (W x H):

444 x 132 mm (3RU) (17 1/2 x 5 1/4 inches)

MKS-8017 32 Crosspoint Module

The Crosspoint module is used to select background and key sources for each M/E or PGM/PST bank. These modules provide two rows of key source selection buttons, plus a source name display row and two background source selection rows. On the key source selection rows, Keys 1/3 and Keys 2/4 can be interchanged. On the Background rows, sources can also be selected from the Utility 1/2 busses. Three-color, backlit LCD displays are used on the source name display row. These enable text and graphics to be displayed in any one of three colors for easy user identification of source type.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

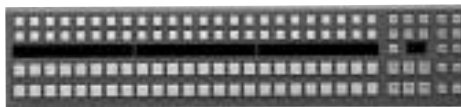
General

Dimensions (W x H):

750 x 132 mm (3 RU) (29 5/8 x 5 1/4 inches)

MKS-8018 24 Crosspoint Module

The crosspoint module is used to select background and key sources for each M/E or PGM/PST bank. These modules provide two rows of key source selection buttons, plus a source name display row and two background source selection rows. On the key source selection rows, Keys 1/3 and Keys 2/4 can be interchanged. On the Background rows, sources can also be selected from the Utility 1/2 bus. Three-color, backlit LCD displays are used on the source name display row. These enable text and graphics to be displayed in any one of three colors for easy user identification of source type.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

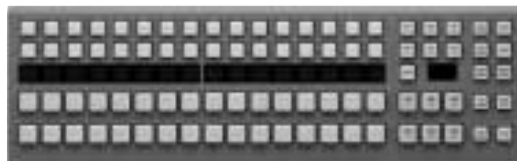
Specifications

General

Dimensions (W x H):
598 x 132 mm (3 RU) (23 1/2 x 5 1/4 inches)

MKS-8019 16 Crosspoint Module

The crosspoint module is used to select background and key sources for each M/E or PGM/PST bank. These modules provide two rows of key source selection buttons, plus a source name display row and two background source selection rows. On the key source selection rows, Keys 1/3 and Keys 2/4 can be interchanged. On the Background rows, sources can also be selected from the Utility 1/2 bus. Three-color, backlit LCD displays are used on the source name display row. These enable text and graphics to be displayed in any one of three colors for easy user identification of source type.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
444 x 132 mm (3 RU) (17 1/2 x 5 1/4 inches)

MKS-8020 Standard Transition Module

The standard transition module is used to cut or transition images on each M/E or PGM/PST bank. It consists of a standard transition area equipped with fader lever and four additional dedicated key transition areas, any of which can be used independently for transition selection and execution. This standard transition area allows priority setting of all four keys with transition preview, while the dedicated key transition area provides buttons for key snapshot store and recall operations.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

293 x 132 mm (3 RU) (11 5/8 x 5 1/4 inches)

MKS-8024 Flexipad Module

The Flexipad Module has 12 Memory Recall buttons, each with a three-color backlit LCD. These LCDs provide a text/graphic display showing the effects stored for each operational mode. This module is used in combination with Wipe and DME Wipe, and operations such as M/E or PGM/PST. It can also be used for Effects, Shot Box and Macros, and even has an undo capability.

Applicable Models

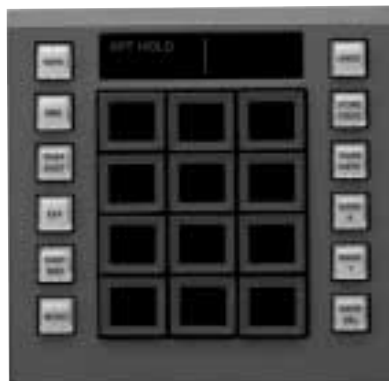
DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8025MS Memory Stick /USB Module

The MKS-8025MS Memory Stick/USB module is used to store and load data such as snapshots, effects, set-up data, images, etc. from Memory Stick. It provides a slot for a Memory Stick and has three USB connectors. These connectors provide interfaces for other types of storage media and for menu operating devices such as a mouse, keyboard, and pen/tablet.

*The MKS-8025MS works exclusively with MKS-8010A System Control Unit

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)

MKS-8026 10 Keypad Module

The 10 keypad module is used to select, store, recall and execute snapshots or effects, and recall and execute Shot Box and Macros. It can also be used to input transition rates. It provides a 12-digit alphanumeric display to show reference region names plus register numbers, depending on its operational mode.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8027 Compact Transition Right Module

The compact 1/2 rack-width transition module fits in a small-scale control panel for edit suits require less space. The module is based on the design of the MKS-8020 Standard Transition Module with simple key transition operations.

Features

*Size reduced to 1/2 rack-width to fit in a compact switcher system *Uses the same design as the MKS-8020 Standard Transition Module for common transition part
*Key transition part consists of transition button *Using the MKS-8027 and MKS-8028 for adjacent M/Es, the fader levers do not interfere with each other

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8028 Compact Transition Left Module

The compact 1/2 rack-width transition module fits in a small-scale control panel for edit suits require less space. The module is based on the design of the MKS-8020 Standard Transition Module with simple key transition operations.

Features

- *Size reduced to 1/2 rack-width to fit in a compact switcher system
- *Uses the same design as the MKS-8020 Standard Transition Module for common transition part
- *Key transition part consists of transition button
- *Using the MKS-8027 and MKS-8028 for adjacent M/Es, the fader levers do not interfere with each other

Applicable Models

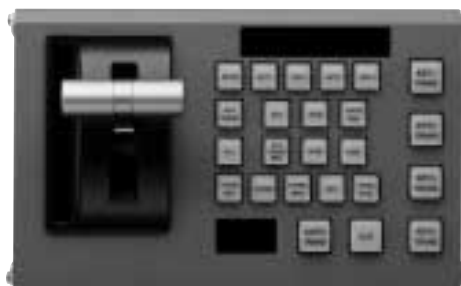
DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8030 Key Frame Module

The key frame module is used to set and edit keyframes and to execute effects. It consists of an effects execution block and a keyframe setting and editing block. The effects execution block is equipped with a fader lever for manual execution of effects.

Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8031JS Joy Stick Module

The joy stick module has identical functionality and are used to position wipes, the 3D Transform of the DME, and also to control tape and disc recorder functions. The parameters of control knobs 1-3 on the main menu panel can also be adjusted using the joy stick.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8031TB Track Ball Module

The track ball module has identical functionality and are used to position wipes, the 3D Transform of the DME, and also to control tape and disc recorder functions. The parameters of control knobs 1-3 on the main menu panel can also be adjusted using the track ball.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8032 DSK Fader Module

The DSK fader module is used to set up and execute transitions of the four keyers on the PGM/PST bank. A fader lever is included to execute manual transitions of one or more keyers.

Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MKS-9011 1 M/E Control Panel
 MKS-9012 2 M/E Control Panel
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3RU) (8 3/4 x 5 1/4 inches)



MKS-8033 Utility/Shotbox Module

The 24 memory recall buttons of this module have three-color, backlit LCDs to display the selection of effects and functions in text or graphics. Any Shot Box or Macro, plus a variety of utility functions, can be allocated to the module and any of these preset effects and functions can be instantly executed at the press of a single button. The delegation of all 24 memory recall buttons can be collectively changed at any one time by pressing the bank buttons.

Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MKS-9011 1 M/E Control Panel
 MKS-9012 2 M/E Control Panel
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8034DK DSK/FTB Module

The DSK/FTB module is used to execute Fade-To-Black, and to conduct preview switching using the Edit Preview BUS. Control of externally connected DSKs (PFV-SP Series) is available from the DSK/FTB module.

Applicable Models

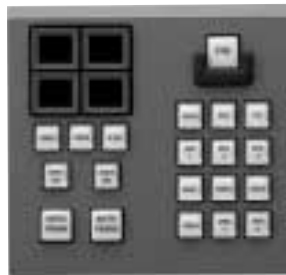
DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8034FB FTB Module

The FTB module is used to execute Fade-To-Black, and to conduct preview switching using the Edit Preview Bus. Control of externally connected DSKs (PFV-SP Series) is available from the DSK/FTB module.

Applicable Models

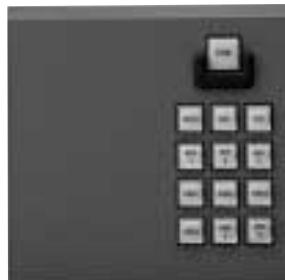
DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8035 Key Control Module

The key control module is used to adjust and modify each keyer on any of the M/E or PGM/PST banks. It is also used to assign the DME keyers. The DME allocation block not only displays the current status of the allocation of each DME channel or which key is on-air, but also outputs desired channels to monitors. It can also change the allocated channel to another keyer in a mandatory way.

Applicable Models

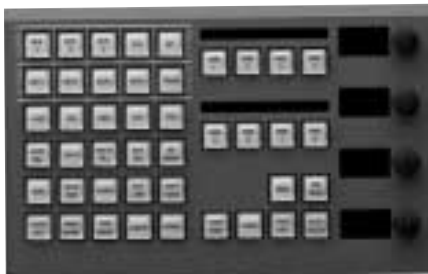
DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MKS-9011 1 M/E Control Panel
 MKS-9012 2 M/E Control Panel
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8040 Blank Panel

Features

*1/3 rack width size blank panel

Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8041 Blank Panel

Features

*1/2 rack width size blank panel

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
220 mm x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8050 Editing Keyboard (MVS-8000A, DVS-9000, MFS-2000)

The MKS-8050 Editing Keyboard adds editing functions to the MVS-8000A series, the DVS-9000 series, and MFS-2000 production switcher systems by connecting the MKS-8050 to the MKS-8010A System Control Unit, the MKS-2010, the MKS-2015, or the MKS-2017 Control Panels. The MKS-8010A, the MKS-2010, the MKS-2015, and the MKS-2017 require BZS-8050 Editing Control Software to be installed. The MKS-8050 is a QWERTY keyboard.

Supplied Accessories

User Guide (1)
15-pin 10m cable (1)

Optional Accessories

BZS-8050 Editing Control Software (MVS-8000A, DVS-9000, MFS-2000)

MKS-8075 Extension Adaptor

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
220 mm x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)

MKS-8076 Memory Card/USB Adaptor

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
220 mm x 132 (3 RU) (8 3/4 x 5 1/4 inches)

MKS-8080 Aux Bus Remote Panel

Features

*Compact 1 RU design *Single destination *32 source select buttons and four re-entry buttons *Provides the same button arrangements as those on the CCP-8000/CCP-9000 Series Center Control Panel for intuitive operation



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operational Manual (1)
T-Bridge and 75 Ω Terminator (1)

Specifications

General

Power requirements:
100 to 240 V AC, 50/60 Hz
Power consumption:
10 W
Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (- 4 to 140 °F)
Operating humidity:
10 to 90%
Dimensions (W x H x D):
440 x 44 x 116.5 mm (17 3/8 x 1 3/4 x 4 5/8 inches)
Mass:
Approx. 1.4 kg (3 lb)

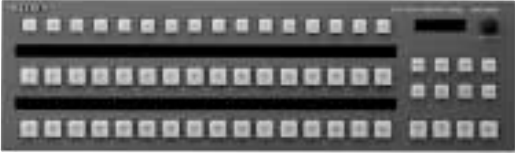
Remote

Remote 1 S-BUS
Connector type:
BNC connector (1)
Data transfer method:
BI-PHASE SPACE
Data transfer rate:
312 kb/s / 1250 kb/s
Remote 2 RS-422A
Connector type:
D-sub 9-pin female (1)
Data transfer method:
Conforming to the EIA RS-422A
Data transfer rate:
38.4 kb/s
Remote 3 RS-232C
Connector type:
D-sub 9-pin male (1)
Data transfer method:
8 bits, Non parity, No check
Data transfer rate:
38.4 kb/s
Signal transfer distance:
500 m (75 Ω coaxial cable, BELDEN 8281 or equivalent)

MKS-8082 Aux Bus Remote Panel

Features

*3 RU height *Assignable 16 delegation buttons for immediate access to multiple destinations *32 source select buttons and four re-entry buttons *Provides the same button sizes as those on the CCP-8000/CCP-9000 Series Center Control Panel to offer same touch and feel *Provides source name display



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operational Manual (1)
T-Bridge and 75 Ω Terminator (1)

Specifications

General

Power requirements:
100 to 240 V AC, 50/60 Hz
Power consumption:
25 W
Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (4 to 140 °F)
Operating humidity:
10 to 90%

Dimensions (W /H /D):

440 x 132 x 120 mm (17 3/8 x 5 1/4 x 4 3/4 inches)

Mass:

Approx. 2.6 kg (5 lb 12 oz)

Remote

Remote 1 S-BUS

Connector type:
BNC connector (1)

Data transfer method:
BI-PHASE SPACE

Data transfer rate:
312 kb/s / 1250 kb/s

Remote 2 RS-422A

Connector type:
D-sub 9-pin female (1)
Data transfer method:
Conforming to the EIA RS-422A

Data transfer rate:
38.4 kb/s

Remote 3 RS-232C

Connector type:
D-sub 9-pin male (1)

Data transfer method:

8 bits, Non parity, No check

Data transfer rate:

38.4 kb/s

Signal transfer distance:

500 m (75 Ω coaxial cable, BELDEN 8281 or equivalent)

MKS-8110M 17-Input Board (HD/SD Multi-format)

The MKS-8110M is an optional HD SDI or SD SDI input board. With this option fitted, the MVS-8000 Series Switcher processor provides 17 HD SDI or SD SDI inputs.

Features

*The MVS-8000 switcher processor can expand up to 80 inputs with the MKS-8110M and MKS-8111M *The MVS-8000SF switcher processor can expand up to 34 inputs

Applicable Models

MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

MKS-8110SD 17-Input Board (SD)

The MKS-8110SD is an optional SD SDI input board. With this option fitted, the MVS-8000/DVS-9000 Series switcher processor provides 17 SD SDI inputs

Features

*The MVS-8000 and DVS-9000 switcher processor can expand up to 68 inputs *The MVS-8000SF and DVS-9000 SF switcher processor can expand up to 34 input

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor

MKS-8111M Additional 12-Input Board (HD/SD Multi-format)

MKS-8111M is an optional board that provides 12 HD SDI or SD SDI inputs. The HD SDI or SD SDI inputs of MVS-8000 and DVS-9000 Switcher processor can be expanded up to 80 in combination use of four MKS-8110M boards and a MKS-8111M board.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MKS-8111SD Additional 12-Input Board (SD)

MKS-8111SD is an optional board that provides 12 SD SDI inputs. The SD SDI inputs of MVS-8000 and DVS-9000 switcher processor can be expanded up to 80 in combination use of four MKS-8110SD boards and a MKS-8111SD board.

Applicable Models

DVS-9000 Production Switcher Processor

MKS-8160A 24-Output Board Set (HD/SD Multi-format)

The MKS-8160A is an optional HD SDI/SD SDI multi-format output board. With this option installed, the MVS-8000A Switcher processor offers 24 HD SDI or SD SDI outputs.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MKS-8161M Monitor Output Board

The MKS-8161M is an optional HD SDI/SD SDI multi-format output board. With this option fitted, the MVS-8000 Switcher processor offers eight re-clocked outputs to which the primary input signals can be routed with minimum delay. Those outputs are useful to monitor every primary input signal or to re-entry the primary input signals through the external processors such as colour correctors.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MKS-8162A 12-Output Board

The MKS-8162A adds 12 outputs to the 12 outputs standard on the MVS-8000ASF, making the total outputs 24.

Applicable Models

MVS-8000ASF Multi-Format Switcher Processor

MKS-8170M DME Interface Board (HD/SD Multi-format)

Features

A DME interface board for multi-format applications for MVS-8000 Series.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher
Processor

MKS-8210A Mix/Effect Board

The MKS-8210A mix/effects board is an optional board for the MVS-8000A and MVS-8000ASF production switcher systems. By installing the MKS-8210A, the MVS-8000A Switcher processor can be extended from two to four M/Es and the MVS-8000ASF Switcher processor can be extended from one to two M/Es.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher
Processor

MKS-8440A Frame Memory Board

The MKS-8440A frame memory board is an optional board for the MVS-8000A and the MVS-8000ASF production switcher systems. By installing the MKS-8440A, the MVS-8000A Series can store 58 frames of HD images*. Images can either be stored separately or paired for video/key operation.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher Processor

MKS-8440SD Frame Memory Board Set

The MKS-8440SD is an optional frame memory board set for SD applications. With this option installed, the MVS-8000 Series switcher processor offers high capacity SD frame memories with animated playout capability.

MKS-8700 Device Control Unit

The MKS-8700 is a device control unit for MVS-8000 Series in conjunction with MKS-8701 Tally/GPI Board and/or MKS-8702 Serial Interface Board. Up to five boards can be installed. One MKS-8700 can provide Tally/GPI port expansion in 3-port increments up to 15 ports (18 channels per one port) in combination with the MKS-8701. It can also provide RS-422A port expansion in 6-port increments up to 30 ports in combination with the MKS-8702.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Installation Manual (1)
75 Ω terminator (1)

Optional Boards

MKS-8701 Tally/GPI Output Board
MKS-8702 Serial Interface Board

Optional Peripherals

HK-PSU03 Backup Power Supply Unit

Specifications

General

Power:
Power Requirement
100-240 V AC +/- 10% 50/60 Hz

Power Consumption

max. 250 W

Dimensions (W x H x D, without projection):

482 mm x 132 mm x 520 mm
(19 x 5 1/4 x 20 1/2 inches)

Mass:

18 kg (39 lb 10 oz) (Fully Loaded)

Operation Temperature:

+5 °C to +40 °C (+41 °F to +104 °F)

Relative Humidity:

Up to 90% (Non-Condensing)

Reference

Reference Input:

BNC connector x 2, Loop-through
HD Tri-level Sync (HDTV only) or
Analog Black Burst or Sync

System Interface

Peripheral LAN :

RJ-45, 100BASE-TX

Serial Tally 1:

D-sub 9-pin, RS-422A

Serial Tally 2:

D-sub 9-pin, RS-422A

TALLY/GPI * :

D-sub 37-pin, relay contact outputs 18-ch
up to 15 ports in steps of 3 ports in a
frame

REMOTE :

D-sub 9-pin, RS-422A, various protocols,
up to 30 ports in steps of 6 ports in a
frame

TALLY/GPI and REMOTE ports are alternatively
installed. Mixed configuration of TALLY/GPI and
REMOTE ports are possible.

MKS-8701 Tally/GPI Output Board

The MKS-8701 is a tally/GPI output board for MVS-8000 Series in conjunction with MKS-8700 Device Control Unit and/or MKS-8702 Serial Interface Board. Up to five boards can be installed. One MKS-8700 can provide Tally/GPI port expansion in 3-port increments up to 15 ports (18 channels per one port) in combination with the MKS-8701. It can also provide RS-422A port expansion in 6-port increments up to 30 ports in combination with the MKS-8702.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8700 Device Control Unit
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher
Processor

MKS-8702 Serial Interface Board

The MKS-8702 is a serial interface board for MVS-8000 Series in conjunction with MKS-8700 Device Control Unit and/or MKS-8701 Tally/GPI Interface Board. Up to five boards can be installed. One MKS-8700 can provide RS-422A port expansion in 6-port increments up to 30 ports in combination with the MKS-8702. It can also provide Tally/GPI port expansion in 3-port increments up to 15 ports (18 channels per one port) in combination with the MKS-8701.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8700 Device Control Unit
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

MKS-9011A 1 M/E Control Panel

The MKS-9011A allows the configuration of a compact 1 ME switcher system that offers the operational convenience and system performance. This compact control panel is well suited for use in small OB VANS and edit suites or as sub remote panels for the MVS-8000/DVS-9000 Series switchers.

Features

*19-inch rack width with 1 M/E, 12 crosspoint buttons, source name display and 1 Key bus row * Built-in SCU (System Control Unit) *Can be used with the MVS-8000 /DVS-9000 Series switchers *Can be used as a sub M/E remote panel for the MVS-8000/DVS-9000 Series switchers



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Menu Panel Stand Brackets (1)
75 Ω terminator (1)
BNC T-bridge connector (1)
Panel Cable (D-sub 50-pin, 0.4 m) (1)
Switch cover (1)
Key top removing tool (1)
CD-R (*) (1)
Operation manual (1)
Installation manual (1)
Maintenance manual part I (1)

Optional Accessories

HK-PSU11 Redundant PSU
SWC-5002 Control Panel Cable
SWC-5005 Control Panel Cable
SWC-5010 Control Panel Cable

Optional Panels

MKS-8011 Menu Panel
MKS-8031TB Track Ball Module
MKS-8032 DSK Fader Module
MKS-8033 Utility/Shotbox Module
MKS-8035 Key Control Module
MKS-8041 Blank Panel

Optional Peripherals

MKS-8075 Extension Adaptor
(*) Software and User's guide (E/J)

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz
Power consumption:
0.9 to 0.4 A
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)
Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)

Main Panel:
440 x 175 x 386 mm
(17 3/8 x 7 x 15 1/4 inches)
Menu Panel:
424 x 220 x 46 mm
(16 3/4 x 8 3/4 x 1 13/16 inches)

Mass

Main Panel:
10 kg (22 lb)
Menu Panel:
2.2 kg (4 lb 13 oz)

Control

Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
Peripheral LAN:
RJ-45, 100Base-TX
GPI:
D-SUB 25-pin, relay contact outputs x 4,
open collector outputs x 4
Remote:
BNC connector, S-BUS
Device:
USB type A
Main Panel:
D-sub 50-pin
Menu Panel:
D-sub 50-pin
Ext Panel:
D-sub 50-pin

MKS-9012A 2 M/E Control Panel

The MKS-9012A allows the configuration of a compact 2 M/E switcher system that offers the operational convenience and system performance. This compact control panel is well suited for use in small OB VANS and edit suites or as sub remote panels for the MVS-8000/DVS-9000 Series switchers.

Features

*19-inch rack width with 2 M/E, 12 crosspoint buttons, source name display and 1 Key bus row * Built-in SCU (System Control Unit) *Can be used with the MVS-8000 /DVS-9000 Series switchers *Can be used as a sub M/E remote panel for the MVS-8000/DVS-9000 Series switchers



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Menu Panel Stand Brackets (1)
75 Ω terminator (1)
BNC T-bridge connector (1)
Panel Cable (D-sub 50-pin, 0.4 m) (1)
Switch cover (1)
Key top removing tool (1)
CD-R (*) (1)
Operation manual (1)
Installation manual (1)
Maintenance manual part I (1)

Optional Accessories

HK-PSU11 Redundant PSU
SWC-5002 Control Panel Cable
SWC-5005 Control Panel Cable
SWC-5010 Control Panel Cable

Optional Panels

MKS-8011 Menu Panel
MKS-8031TB Track Ball Module
MKS-8032 DSK Fader Module
MKS-8033 Utility/Shotbox Module
MKS-8035 Key Control Module
MKS-8041 Blank Panel

Optional Peripherals

MKS-8075 Extension Adaptor

(*) Software and User's guide (E/J)

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz
Power consumption:
0.9 to 0.4 A
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)
Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)

Main Panel:
440 x 186.6 x 442 mm
(17 3/8 x 7 3/8 x 17 1/2 inches)
Menu Panel:
424 x 220 x 46 mm
(16 3/4 x 8 3/4 x 1 13/16 inches)

Mass

Main Panel
11.5 kg (25 lb 5 oz)
Menu Panel:
2.2 kg (4 lb 13 oz)

Control

Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
Peripheral LAN:
RJ-45, 100Base-TX
GPI:
D-SUB 25-pin, relay contact outputs x 4,
open collector outputs x 4
Remote:
BNC type, S-BUS
Device:
USB type A
Main Panel:
D-sub 50-pin
Menu Panel:
D-sub 50-pin
Ext Panel:
D-sub 50-pin

SWC-5002 Control Panel Cable

Features

*50-pin *2 m * MKS-8010 <—> CCP-8000 Series,
MKS-8011, external panel modules
*MKS-9011/9012 <—> MKS-8011, external panel modules

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel

SWC-5005 Control Panel Cable

Features

*50-pin *5 m * MKS-8010 <—> CCP-8000 Series,
MKS-8011, external panel modules
*MKS-9011/9012 <—> MKS-8011, external panel modules

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

SWC-5010 Control Panel Cable

Features

*50-pin *10 m * MKS-8010 <—> CCP-8000 Series,
MKS-8011, external panel modules
*MKS-9011/9012 <—> MKS-8011, external panel modules

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Network Players

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BZSQ-CREATE 10	290
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NSP-100 Network Player

Features

The NSP-100, coupled with almost any kind of display, is capable of delivering high-quality MPEG-2 video, graphics and scrollable text in an easily viewable layout and at the right time. This type of content display is ideal for advertising and multimedia entertainment. The NSP-100 is a perfect tool for applications ranging from point of sale, point of information (including video-on-demand), corporate training/communications, interactive kiosks and entertainment.

MPEG-2 video, graphics, and scrollable text

The NSP-100 offers excellent picture quality, similar to that available on DVD, with high-quality MPEG-2 MP@ML encoded video at a bit rate of up to 9 Mb/s. Not only does the NSP-100 play high-quality video, it is also capable of displaying full-colour bitmap images and scrollable text allowing incredible multimedia presentations.

Large storage capacity

The NSP-100 is equipped with a 40 GB HDD (Hard Disc Drive) and is capable of storing up to 18 hours of video compressed at a bit rate of 4 Mb/s or 9 hours of video compressed at 8 Mb/s. The high-capacity HDD allows users to store a large number of clips and programmes for uses ranging from advertisements to training videos.

Industry-standard interfaces

The NSP-100 has a variety of interfaces allowing the unit to communicate with a wide range of equipment. For displaying video, it is equipped with component, RGB, S-Video, and composite outputs. The Ethernet 100Base-T port allows the network player to communicate and receive content over TCP/IP networks, while an RS-232C/GPI control and two phono connectors for audio are provided.

Supplied Accessories

AC adapter and AC cable
IR Remote Control

Optional Software

Ziris Create, File Management, Authoring and Scheduling Software
Ziris Transfer, Content distribution Software
Ziris Manage, Play-out Device and Display Management software

Specifications

General

Dimensions (W x H x D):

180 x 44 x 130 mm (7 1/8 x 1 3/4 x 5 1/8 inches)

Mass:

Approx. 1.0 kg (2 lb 3 oz)

Power:

Power consumption; Approx. 18 W

Power supply; DC 12 V provided from an AC adapter

Hard Disc Drive:

40 GB

Video & Audio

Video rate:

4.0 Mb/s ~ 9.0 Mb/s

Audio rate:

256 kb/s

Audio channel:

MPEG-1 Audio Layer II, 2 channels (fixed)



Compact portable design

Packaged as a palm-sized lightweight unit, the NSP-100 is a powerful yet inconspicuous network appliance. It measures just 180 x 44 x 130 mm and weighs approximately 1 kg. When used as a set-top box or a network appliance, the unit can be concealed so as not to interfere with the natural decor of the environment in which it is placed.

User-friendly operation with the supplied IR remote controller

The NSP-100 is supplied with an IR remote controller, the RM-NSP1, which can be used for system set-up and control. The set-up menu is accessed via this remote, allowing the IP address to be set and language selected. The remote is also used to select files and control the video.

"The NSP-100 redefines information distribution mechanisms and provides users with custom-tailored content at the right time, in the right place, right now."

Audio sampling rate:

48 kHz

Video scaling size and position:

Any size, any position

Image

Size:

NTSC 720 x 480, PAL 720 x 576

Colours:

Up to 24-bit RGB, full colour

Scrolling Text (Letter)

Font size (fixed):

16 x 32 pixels (W x H)

Number of colours:

Any two colours (one colour for characters and one colour for background)

Interface

Video out:

Component (BNC x3); Y, Pb, Pr/RGB (sync on green) switchable S-Video (Y/C)

Composite (BNC x1)

Audio out:

Phono x2, consumer standard, analogue unbalanced

Network

10/100Base-T Ethernet, RJ-45 modular jack

RS-232C or GPI (switchable) D-Sub 9-pin (Male) x1

NSP-1 Network Player

Features

The NSP-1 provides local storage and playout within Digital Signage applications and manages the presentation of up to five simultaneous image layers, including graphics, video, text and Flash content. For added flexibility, video can be played out from the hard drive of the NSP-1 or merged with other content layers from an external video feed. An audio channel can be used for background music or narration in addition to the video soundtrack. Its flexibility, video output quality, compact size and reliability ensures peace of mind when deployed in mission critical environments.

High Quality Graphics and Text

The NSP-1 supports a variety of graphics formats including full colour bitmaps (.bmp) as well as JPEG, Macromedia Flash™ and HTML. Small bitmap images such as logos can be positioned anywhere within the display area. Text can be specified in any colour and position on screen, with optional scrolling or flashing effects added as required.

Excellent Video Quality

High bit rate MPEG-2 compression ensures clear, true-to-life DVD quality video images.

Portrait Mode

Content can be presented in a choice of portrait or landscape modes to suit display orientation.

Selectable Output Resolution and Aspect Ratio

Supplied Accessories

AC adapter and AC cable

Stand for desktop mounting in vertical position

Operation manual (downloadable from the NSP-1 HDD)

Optional Software

Ziris Create, File Management, Authoring and Scheduling Software

Ziris Transfer, Content distribution Software

Ziris Manage, Play-out Device and Display Management software

Specifications

General

Dimensions (W x H x D):

210 x 44 x 167 mm (8 3/8 x 1 3/4 x 6 5/8 inches)

Mass:

Approx. 1.5 kg (3 lb 1 oz)

Power:

Power Power consumption: Approx. 45 W

Power supply: DC 13.5 V provided from an AC adapter

Operating temperature +5 to +40°C (+42 to +104°F)

Storage temperature -20 to +55°C (-4 to +131°F)

Hard Disc Drive:

40 GB

Output (Media Formats)

MPEG-2 Video:

MPEG-2 MP@ML, 4.0 Mb/s - 9.0 Mb/s

Audio:

MPEG-1 Audio Layer II 2 channels (fixed), 256 kb/s, 48 kHz

Graphics:

Bitmap (.bmp), JPEG (.jpg), FLASH (.swf), HTML (.htm or .html)

Text:

Bitmap (.bmp), Text (.txt)



Output image resolution and aspect ratios can be specified as:

- 4:3 RGB: VGA, SVGA, XGA
- 16:9 RGB: WVGA
- 4:3 Composite Video: NTSC, PAL

Dedicated Audio Track

The dedicated audio track is ideal for adding background music or narration to accompany video and other graphic presentation elements.

Browser-Based Remote Setting & Scheduling
NSP-1 functions can be controlled via a connected PC and web browser.

Audio:

Linear Audio (.wav), MP3 (.mp3)

A/V In NTSC, PAL, Stereo Audio

Output (Screen Image)

Analogue:

RGB VGA (640 x 480 pixels), WVGA (848 x 480 pixels),

SVGA (800 x 600 pixels), XGA (1024 x 768 pixels)

Composite Video*:

NTSC (720 x 480 pixels), PAL (720 x 576 pixels)

Screen:

Rotation Landscape, Portrait (+90°, -90°)

Interface

Video OUT:

Analogue RGB, HD D-sub 15-pin (female) x1, Composite (RCA phono type x1)

Audio OUT:

Stereo RCA phono type x2, analogue unbalanced

Video IN:

Composite (RCA phono type x1)

Audio IN:

Stereo RCA phono type x2, analogue unbalanced

Network:

10/100Base-T Ethernet, RJ-45 modular jack x1

PCMCIA Type II x1

USB USB 1.1 x2

Serial RS-232C, D-sub 9-pin (male) x1,

GPI D-Sub 25-pin (female) x1

Operating System and Network:

Operating system Linux

Supporting protocols:

TCP/IP, HTTP

Ziris Create BZSQ-CREATE 10

Ziris Create Software License

BZSQ-CREATE DV10

Additional Ziris Create 10 device licenses

Features

Ziris Create has three core functions;

- To able content ingest
- To able user content file management
- To able content play list and schedule authoring.

Ziris Create takes a simple concept of an Administrator and an Author, and brings them to an IP content authoring, publishing & distribution environment. Both Administrator and Author function work together to develop collections of content and deliver them to a distributed network of devices for play out.

The Administrator function allows the user to allocate access privileges and define further User/Author roles. The Administrator function also allows the user to create groups of terminals to which similar content can be developed and delivered. In this way a Group could be all terminals within a retail complex, or all terminals within specific retail areas. Groups are defined on a user basis and in line with the users needs.

The Author function allows users to pull together content from different sources into a single collection. The media within a collection can then be customised with text and graphics. Text can be formatted in terms of font, position, colour size etc and graphics added and positioned for maximum effect within the media.

The whole process is simple to understand and complete. Users simply drag and drop content to a timeline and much like basic editing software, define the times at which graphics and text should appear. Sophisticated media content can be created easily by combining graphics, media and text.

Once created the item is validated i.e. checked for continuity, and consistency and a play out timeline is created for the group of devices. The Author collates media content to the timeline to create a play out schedule. The play out schedule is then uploaded to the remote play out devices manually, automatically, or at a predefined time. The system provides an effective colour-coding scheme to show the stage of the upload process, and whether ultimately, it has been successful.



Core Application Features

- Web Infrastructure – can be used local (on PC) and Remote (Server)
- Secure Account Login and User Account Management
- Software Licensing by number of devices
- Multi-Language Support (requires translation)
- Dual screen support Official release: April 2005

Content Ingest

- Importing of content into flexible directory structure
- Manual or automatic 'hot folder' imports
- Automatic format conversion to NSP-100 file format

Scheduling

- Drag-and-drop on to channel timeline for scheduling single playlists
- Scheduled or Immediate playout (NSP) and Default playlists
- Campaign scheduling wizard for scheduling daily playout between a start and end date, across multiple channels. Can also select days of the week.

Content Management

- Management of video, images, text and playlists in folders
- Export of content and playlists

- Export of Ziris-View playlist into MOV video file

Playlist Authoring

- Playlist authoring for a large variety of screen formats, sizes and orientations (including portrait and widescreen)
- Support for multiple network player types:
NSP-100
NSP-1
BZSQ-View Lt Ziris View (PC Solution)
BZSQ-View 500 Ziris View (PC Solution)
- Automatic playlist creation for simple presentations
- WYSIWYG Layout and text editors for creating and previewing custom designs
- Ability to combine playlists
- Portrait mode playlist creation for NSP-1 and Ziris-View

Channel Management

- Grouping of devices into channels to facilitate scheduling and upload to multiple devices
- Single click upgrade to Ziris Transfer

Content Upload

- Simple upload option for transferring content and schedules to devices (either directly or through Ziris-Transfer)
- Colour-coding scheme on timeline for displaying upload status
- Batch upload using scheduling wizard, with detailed status reporting

Dynamic Content Management

- Dynamic Pull – HTML support for Ziris-View and NSP-1
- Identification of Live Video Input for NSP-1 in Video Layer
- Dynamic Push – Local 'Hot-Folder' dynamic text support for Ziris View
- Push based MPEG-4 Video Streaming for Ziris-View & NSP-1 (allow authoring of playlists to reference video server)

System Requirements

Intel P4 2.8GHz, 1GB DDR, 120GB HDD, Windows XP Professional.

Monitor 1024 x 768 resolution, true colour

Ziris Transfer BZSQ-TFR FTP 50

Features

Ziris Transfer provides File transfer over 'reliable' distribution networks such as simple LAN. (FTP). These are typically IT infrastructure solutions that are framed around the more efficient use of the TCP network protocol for massive file distribution to many points. The general file transfer technologies have an advantage as they provide simple integration into existing IT networks, but at the cost of a less efficient method of distributing content for large numbers of receivers. The standard File Transfer Protocol is the most well known and most widely implemented approach as it is free (in terms of knowledge and technology) but does have a cost associated in terms of performance, efficiency and cost of development to make reliable.

Core Application Features

- Web Infrastructure – can be used local (on PC) and Remote (Server)
- Secure Account Login and User Account Management
- Software Licensing by number of devices
- Multi-Language Support

Transfer Status Monitoring

- Dynamically updates transfer status

FTP and Multicast Transfer

- Unicast FTP or Multicast using Shrimp FEC technology
- Transfer immediately or within a time window

Configuration

- Zero Device Configuration (handled in Ziris-Create)

FTP Transfer

- FTP Transfer to channels defined in Ziris Create
- No additional channel configuration required in Ziris Transfer
- Automatic retry of failed transmissions
- Transfer immediately or during time window

System Requirements

Intel P4 2.8GHz, 512MB DDR, 80GB HDD, Windows XP Professional.

Monitor 1024 x 768 resolution, true colour



Transfer Status Monitoring

- Dynamic status updates on all transfers
- Search transfers according to status, job name, destination, device name and date
- Fine tune settings: record archive period and content deletion

Status in Ziris Manage

- Updates Ziris Manage with status from Ziris Transfer
- Number of failed transfers

HTTP Upload Support

- NSP1 support for HTTP upload

Ziris Manage

BZSQ-MANAGE 10

Ziris Manage Software License

BZSQ-MANAGE DV10

Additional Ziris Manage 10-device licenses

Features

Ziris Manage is a device management and monitoring software. It monitors play out devices such as the NSP-Series and Ziris View to report and provide a live status of their condition, including 'As Run' logs, device reporting, configuration, status, logging etc. Other devices it is able to monitor and manage include plasma's and LCD displays and projectors.

Core Application Features

- Web Infrastructure – can be used local (on PC) and Remote (Server)
- Secure Account Login and User Account Management
- Software Licensing by number of devices
- Multi-Language Support

Configuration

- Registration and management of devices for monitoring
- Screens and network players can be monitored in groups or individually.
- Configuration of device parameters – NSP-1, NSP-100

Status

- Real-time status reporting for digital signage devices, Ziris-View, NSP-1, NSP-1, Sony Network Projector
- Indicates whether network players, plasmas, monitors and projectors are switched on
- Displays current media playout information, download status and remaining disc space for network players
- Alerts of any errors

System Requirements

Intel P4 2.8GHz, 512MB DDR, 80GB HDD, Windows XP Professional.

Monitor 1024 x 768 resolution, true colour



Logging

- Maintains details of registered playout devices and their associated displays

Firmware Upgrade

- Upgrade of device firmware for one or many NSP-1, NSP-100
- Immediate or scheduled upgrade

Remote Device Control

- Can schedule reboot and sleep times for NSP-1, NSP-100
- Can switch input channels, switch on/off through RS232 of playout device
- Schedule reboot and sleep times for Ziris View
- Control and status viewing of Scion video switches

Ziris Transfer Integration

- Ziris Transfer status indication within device tree

Viewing Content Store on Devices

- View of Media/content on play out device (no modification of data will be possible)
- Error Notification
- SMS or E-mail notification of error status

Ziris View

BZSQ-VIEW LT

4 layer, Play-out Application Software

BZSQ-VIEW 500

10 layer, Playout Application Software

Features

Ziris View is a software application that is designed to turn a standard PC into a playout unit for Digital Signage applications. Ziris View will manage the playout of video, audio and graphically content, as described by a play-list and is analogist to the Sony NSP-1 playout server. The Ziris View player software supports the same basic functions and features when compared to dedicated players however it can provide a number of operational features that will give users business advantages. These include high quality graphical output display, providing in addition to video, real time information, it is particularly versatile of formats and remains very flexible dependant on customer requirements.

Multi layer PC based playout device

- Up to 10 layers
- Two versions – Lite (4 layers), 500 (10 layers)
- Scheduled or default content
- Flexible format support, including:
mov,mpg,avi,flash,bmp,jpg,gif
- Portrait mode

Dynamic Pull (HTML) - BZSQ-VIEW 500 only

- View pulls HTML content from remote URL
- Configurable refresh rate

System Requirements

Intel P4 2,8GHz, 52MB DDR, 80GB HDD, Windows XP Professional.

Dynamic Push - BZSQ-VIEW 500 only

- Dynamic update of text within a playlist

Live Video Input - BZSQ-VIEW 500 only

- Input through specified video input card

MPEG-4 Video Streaming - BZSQ-VIEW 500 only

- Push based MPEG-4 Video Streaming for Ziris-View & NSP-1 (allow authoring of playlists to reference video server)

Integration with Ziris Manage

- Current status
- As run logs collection

Display Control

- Controls plasma via RS232: power, volume & input
- Supports PVFM42V1 support for PFM-42X1/X1N and FWD-50PX1/PX1N

Remote reboot

- View PC can be rebooted remotely via Ziris Manage

BVM-14F1E	296
BVM-14F5E	297
BVM-20F1E	298
BVM-D14H1E	299
BVM-D14H5E	300
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BVM-D24E1WE	303
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LMD-7220W	319
LMD-9050	320
PVM-9L1	322
PVM-9L2	324
PVM-9L3	325

BVM-14F1E Color Video Monitor

Features

14-inch color video monitor *Modular design with optional separate control unit *HR Trinitron CRT provides high resolution of 800 TV lines *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *RGB/component (Y/R-Y/B-Y) input available as standard *2 slots available for accepting composite, Y/C, RGB, component and SDI signals with the optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Aspect ratio 4:3 and 16:9 switchable *Optional 16:9 bezel *Parallel and serial remote control capability *Optional memory card for storage and recall of primary setup data *Mountable into a 19-inch EIA standard rack with the optional rack mount kit *Supported by Sony Interactive Status Reporting (ISR)

* 13 1/8 inches viewable area, measured diagonally.

Optional Accessories

BKM-20D SDI 4:2:2 Decoder Adaptor
 BKM-21D SDI Multi Decoder Adaptor
 BKM-22X SDI Multi Input Expansion Adaptor
 BKM-24N NTSC Decoder Adaptor
 BKM-25P PAL Decoder Adaptor
 BKM-26M PAL-M Decoder Adaptor
 BKM-27T Tri-standard Decoder Adaptor
 BKM-28X Analog Input Expansion Adaptor
 BKM-48X HD Analog Input Expansion Adaptor
 BKM-10R Monitor Control Unit
 BKM-11R Monitor Control Unit
 BKM-12Y Memory Card
 BKM-14L Auto Setup Probe
 BKM-33H14 16:9 Mask
 BKM-31E14 Rack Mount Kit
 MB-510 Mounting Attachment
 RCC-G Cables 9-pin/9-pin Cable
 * BKM-12Y is utilized with BKM-10R/11R. ** MB-510 is utilized with BKM-10R.

Specifications

General

System:
 625 lines 50 fields or 525 lines 60 fields interlace
 Power requirements:
 AC 100 to 120 V/220 to 240 V, 1.5/0.7A, 50/60 Hz
 Power consumption:
 Max. 145 W (with options)
 Dimensions:
 346 (W) x 280 (H) x 530 (D) mm
 (13 5/8 x 11 1/8 x 20 7/8 inches)
 Mass:
 23 kg (50 lb 11 oz)
 CRT
 CRT type:
 14-inch HR Trinitron
 AG pitch:
 0.25 mm, 90° deflection, ϕ 29.4 mm in-line gun
 Phosphor:
 EBU

Effective picture size:

268 (W) x 201 (H) mm, 332 mm (diagonal)
 (10 5/8 x 8 inches, 13 1/8 inches)

Color temperature:

D65/D93/adjustable to other color temperature

Preset brightness:

100 cd/m² (when a 1.0 Vp-p 100% white signal is input)

Resolution:

800 TV lines

Inputs/outputs

Video:

Loop-through BNC

RGB

R/B:

0.7 Vp-p \pm 6 dB, positive, high impedance

G:

1.0 Vp-p \pm 6 dB, sync negative, high impedance

Analog component

Y:

1.0 Vp-p \pm 6 dB, positive, high impedance

R-Y/B-Y:

0.7 Vp-p \pm 6 dB, positive, high impedance

External sync:

Loop-through BNC

Composite:

0.3 to 8.0 Vp-p negative, high impedance

Return loss:

More than 46 dB (7 MHz when 75 Ω terminated)

Remote

Remote 1:

Loop-through D-sub 9-pin (RS-485 serial interface)

Remote 2:

D-sub 9-pin (option: Mini-DIN 8-pin)

ISR:

D-sub 9-pin



Video signal performance

Differential gain:

Within 2% for luminance from 0 to 100 cd/m²

Differential phase:

Within 2° for luminance from 0 to 100 cd/m²

Frequency response:

50 Hz to 10 MHz \pm 1 dB

DC restoration:

Back porch type, Back level fluctuation, within 1% for 10 to 90% APL input signal variation

Synchronization

AFC time:

Fast mode: 0.5 ms
 Normal mode: 2 ms

Horizontal hold:

Greater than \pm 500 Hz (when AFC 0.5 ms)

Retrace time:

Horizontal: within 10 μ s
 Vertical: within 1 ms (normal), within 0.8 ms (underscan)

Raster and picture performance

Normal scan:

5% overscan of the effective picture area

Underscan:

3% underscan of the effective picture area

Linearity:

Less than 0.5% within a central area bounded by a circle, 1% at any other point

Convergence:

Less than 0.3 mm within a central area bounded by a circle, 0.6 mm at any other point

Raster size stability:

Less than 1% of picture height (at 100 cd/m² peak luminance, 10 to 90% APL)

Operating conditions

Operating temperature:

0 to 35 °C (32 to 95 °F)
 Optimum operating range 20 to 30 °C (68 to 86 °F)

Humidity:

0 to 90% (no condensation)

Altitude:

Approx. 3,050 m (10,000 ft)

BVM-14F5E Color Video Monitor

Features

14-inch color video monitor *Stand-alone design with integral control unit *HR Trinitron CRT provides high resolution of 800 TV lines *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *RGB/component (Y/R-Y/B-Y) input available as standard *4 slots available for accepting composite, Y/C, RGB, component and SDI signals with the optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Aspect ratio 4:3 and 16:9 switchable *Optional 16:9 bezel *Parallel and serial remote control capability *Optional memory card for storage and recall of primary setup data *Mountable into a 19-inch EIA standard rack with the optional rack mount kit *Supported by Sony Interactive Status Reporting (ISR)

* 13 1/8 inches viewable area, measured diagonally.

Optional Accessories

BKM-20D SDI 4:2:2 Decoder Adaptor
BKM-21D SDI Multi Decoder Adaptor
BKM-22X SDI Multi Input Expansion Adaptor
BKM-24N NTSC Decoder Adaptor
BKM-25P PAL Decoder Adaptor
BKM-26M PAL-M Decoder Adaptor
BKM-27T Tri-standard Decoder Adaptor
BKM-28X Analog Input Expansion Adaptor
BKM-48X HD Analog Input Expansion Adaptor
Adaptor
BKM-11R Monitor Control Unit
BKM-12Y Memory Card
BKM-14L Auto Setup Probe
BKM-33H14 16:9 Mask
BKM-30E14 Rack Mount Kit
RCC-G Cables 9-pin/9-pin Cable

Specifications

General

System:
625 lines 50 fields or 525 lines 60 fields interlace

Power requirements:
AC 100 to 120 V/220 to 240 V, 1.8/0.8A, 50/60 Hz

Power consumption:
Max. 175 W (with options)

Dimensions:
482 (W) x 280 (H) x 530 (D) mm
(19 x 11 1/8 x 20 7/8 inches)

Mass:
26 kg (57 lb)

CRT
CRT type:
14-inch HR Trinitron

AG pitch:
0.25 mm, 90° deflection, ϕ 29.4 mm in-line gun

Phosphor:
EBU

Effective picture size:
268 (W) x 201 (H) mm, 332 mm (diagonal)
(10 5/8 x 8 inches, 13 1/8 inches)

Color temperature:
D65/D93/adjustable to other color temperature

Preset brightness:

100 cd/m² (when a 1.0 Vp-p 100% white signal is input)

Resolution:

800 TV lines

Inputs/outputs

Video:

Loop-through BNC

RGB

R/B:

0.7 Vp-p \pm 6 dB, positive, high impedance

G:

1.0 Vp-p \pm 6 dB, sync negative, high impedance

Analog component

Y:

1.0 Vp-p \pm 6 dB, positive, high impedance

R-Y/B-Y:

0.7 Vp-p \pm 6 dB, positive, high impedance

External sync:

Loop-through BNC

Composite:

0.3 to 8.0 Vp-p negative, high impedance

Return loss:

More than 46 dB (7 MHz when 75 Ω terminated)

Remote

Remote 1:

Loop-through D-sub 9-pin (RS-485 serial interface)

Remote 2:

D-sub 9-pin (option: Mini-DIN 8-pin)

ISR:

D-sub 9-pin

Video signal performance

Differential gain:

Within 2% for luminance from 0 to 100 cd/m²

Differential phase:

Within 2° for luminance from 0 to 100 cd/m²

Frequency response:

50 Hz to 10 MHz \pm 1 dB

DC restoration:

Back porch type, Back level fluctuation, within 1% for 10 to 90% APL input signal variation

Synchronization

AFC time:

Fast mode: 0.5 ms

Normal mode: 2 ms

Horizontal hold:

Greater than \pm 500 Hz (when AFC 0.5 ms)

Retrace time:

Horizontal: within 10 μ s

Vertical: within 1 ms (normal), within 0.8 ms (underscan)

Raster and picture performance

Normal scan:

5% overscan of the effective picture area

Underscan:

3% underscan of the effective picture area

Linearity:

Less than 0.5% within a central area bounded by a circle, 1% at any other point

Convergence:

Less than 0.3 mm within a central area bounded by a circle, 0.6 mm at any other point

Raster size stability:

Less than 1% of picture height (at 100 cd/m² peak luminescence, 10 to 90% APL)

Operating conditions

Operating temperature:

0 to 35 °C (32 to 95°F)

Optimum operating range 20 to 30 °C (68 to 86 °F)

Humidity:

0 to 90% (no condensation)

Altitude:

Approx. 3,050 m (10,000 ft)



BVM-20F1E Color Video Monitor

Features

20-inch color video monitor *Modular design with optional separate control unit *HR Trinitron CRT provides high resolution of 900 TV lines *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *RGB/component (Y/R-Y/B-Y) input available as standard *4 slots available for accepting composite, Y/C, RGB, component and SDI signals with the optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Aspect ratio 4:3 and 16:9 switchable *Optional 16:9 bezel *Parallel and serial remote control capability *Optional memory card for storage and recall of primary setup data *Mountable into a 19-inch EIA standard rack with the optional rack mount kit *Supported by Sony Interactive Status Reporting (ISR)

* 19 inches viewable area, measured diagonally.



Optional Accessories

BKM-20D SDI 4:2:2 Decoder Adaptor
BKM-21D SDI Multi Decoder Adaptor
BKM-22X SDI Multi Input Expansion Adaptor
BKM-24N NTSC Decoder Adaptor
BKM-25P PAL Decoder Adaptor
BKM-26M PAL-M Decoder Adaptor
BKM-27T Tri-standard Decoder Adaptor
BKM-28X Analog Input Expansion Adaptor
BKM-48X HD Analog Input Expansion Adaptor
BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-12Y Memory Card
BKM-14L Auto Setup Probe
BKM-32H Control Unit Attachment Kit
BKM-33H20 16:9 Mask
BKM-30E20 Rack Mount Kit
MB-510 Mounting Attachment
RCC-G Cables 9-pin/9-pin Cable

*BKM-12Y is utilized with BKM-10R/11R.

**MB-510 is utilized with BKM-10R.

Specifications

General

System:

625 lines 50 fields or 525 lines 60 fields interlace

Power requirements:

AC 100 to 120 V/220 to 240 V, 2.0/1.0A, 50/60 Hz

Power consumption:

Max. 200 W (with options)

Dimensions:

444 (W) x 414 (H) x 570 (D) mm
(17 1/2 x 16 3/8 x 22 1/2 inches)

Mass:

Approx. 37 kg (81 lb 9 oz)

CRT

CRT type:

20-inch HR Trinitron

AG pitch:

0.30 mm, 90° deflection, ϕ 30.6 mm in-line gun

Phosphor:

EBU

Effective picture size:

386 (W) x 291 (H) mm, 482 mm (diagonal)
(15 1/4 x 11 1/2 inches, 19 inches)

Color temperature:

D65/D93/adjustable to other color temperature

Preset brightness:

100 cd/m² (when a 1.0 Vp-p 100% white signal is input)

Resolution:

900 TV lines

Inputs/outputs

Video:

Loop-through BNC

RGB

R/B:

0.7 Vp-p \pm 6 dB, positive, high impedance

G:

1.0 Vp-p \pm 6 dB, sync negative, high impedance

Analog component

Y:

1.0 Vp-p \pm 6 dB, positive, high impedance

R-Y/B-Y:

0.7 Vp-p \pm 6 dB, positive, high impedance

External sync:

Loop-through BNC

Composite:

0.3 to 8.0 Vp-p negative, high impedance

Return loss:

More than 46 dB (7 MHz when 75 Ω terminated)

Remote

Remote 1:

Loop-through D-sub 9-pin (RS-485 serial interface)

Remote 2:

D-sub 9-pin (option: Mini-DIN 8-pin)

ISR:

D-sub 9-pin

Video signal performance

Differential gain:

Within 2% for luminance from 0 to 100 cd/m²

Differential phase:

Within 2° for luminance from 0 to 100 cd/m²

Frequency response:

50 Hz to 10 MHz \pm 1 dB

DC restoration:

Back porch type, Back level fluctuation, within 1% for 10 to 90% APL input signal variation

Synchronization

AFC time:

Fast mode: 0.5 ms

Normal mode: 2 ms

Horizontal hold:

Greater than \pm 500 Hz (when AFC 0.5 ms)

Retrace time:

Horizontal: within 10 μ s
Vertical: within 1 ms (normal), within 0.8 ms (underscan)

Raster and picture performance

Normal scan:

5% overscan of the effective picture area

Underscan:

3% underscan of the effective picture area

Linearity:

Less than 0.5% within a central area bounded by a circle, 1% at any other point

Convergence:

Less than 0.4 mm within a central area bounded by a circle, 0.7 mm at any other point

Raster size stability:

Less than 1% of picture height (at 100 cd/m² peak luminance, 10 to 90% APL)

Operating conditions

Operating temperature:

0 to 35 °C (32 to 95 °F)

Optimum operating range 20 to 30 °C (68 to 86 °F)

Humidity:

0 to 90% (no condensation)

Altitude:

Approx. 3,050 m (10,000 ft)

BVM-D14H1E Color Video Monitor

Features

14-inch digital color picture monitor *Modular design with optional separate control unit *HR Trinitron CRT provides a high resolution of 800/600 TV lines (4:3/16:9 modes) *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *Signals with the frequency range of 15.625 to 45 kHz and DTV signals acceptable *Component (YPBPR/GBR) input available as standard *3 slots available for optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Built-in H/V delay, underscan, blue only, mono and 3 color tally functions *Built-in test signal generator *Aspect ratio 4:3 and 16:9 switchable *4:3 area marker *Parallel and serial remote control capability *Mountable into a 19-inch EIA standard rack with the optional rack mount kit

* 13 1/8 inches (4:3)/12 1/8 inches (16:9) viewable area, measured diagonally.



Supplied Accessories

4:3 Mask (1)
AC Cable (1)
AC Plug Holder (1)
Tally Label (1)
Operation Manual (1)

Optional Accessories

BKM-142HD HD SDI Input Adaptor
BKM-120D SD-SDI 4:2:2 Input Adaptor
BKM-127W NTSC/PAL Input Adaptor
BKM-129X Analog Component Input Adaptor
BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-14L Auto Setup Probe
BKM-31E14 Rack Mount Kit
MB-510 Mounting Attachment
RCC-G Cables 9-pin/9-pin Cable

Specifications

General

Signal format:
15.625 to 45 kHz
Type:
Display unit
Power requirements:
100 to 240 V AC $\pm 10\%$, 50/60 Hz
Power consumption:
100 W (with options: max. 115 W)
Dimensions*:
346 (W) x 280 (H) x 519 (D) mm
(13 5/8 x 11 1/8 x 20 1/2 inches)
Mass:
Approx. 21 kg (46 lb 3 oz)
CRT

CRT type:
14-inch HR Trinitron
AG pitch:
0.25 mm, 90° deflection, $\phi 29.4$ mm
in-line gun
Phosphor:
EBU
Effective picture size

16:9:
267.5 (W) x 150.5 (H) mm, 306.9 mm
(diagonal)
(10 5/8 x 6 inches, 12 1/8 inches)

4:3:

267.5 (W) x 200.6 (H) mm, 331.6 mm
(diagonal)
(10 5/8 x 8 inches, 13 1/8 inches)

Inputs/outputs

Video:
Loop-through BNC, automatic 75 Ω
termination
GBR:
1.0 Vp-p ± 6 dB, positive
Y:
1.0 Vp-p ± 6 dB, high impedance
PB/PR:
0.7 Vp-p ± 6 dB, high impedance
External sync:
Loop-through BNC, automatic 75 Ω
termination
Composite:
0.3 to 8.0 Vp-p, high impedance,
tri-level bipolar sync

Remote
Option:
RS-232C for BKM-11R, Mini DIN 8-pin
Control unit:
RS-422 for BKM-10R, D-sub 9-pin
Remote 1/Serial remote:
RS-485 serial interface, D-sub 9-pin,
with loop-through
Remote 2/Parallel remote 1:
D-sub 9-pin (Short to ground)
Parallel remote 2:
Modular connector 6-pin
ISR:
Not applicable

Video signal performance

Differential gain (DG):
Within 5% for luminance from 0 to 100
cd/m2
Differential phase (DP):
Within 5° for luminance from 0 to 100
cd/m2
Frequency response:
48 Hz to 24 MHz +0 dB/-3 dB
DC restoration:
Back porch type, back porch level: within
1% of peak luminance, 10 to 90% APL

Synchronization

Retrace time:
Horizontal: under 3.77 μ s
Vertical: under 650 μ s

Raster and picture performance

Normal scan:
5% overscan of the effective picture area
Underscan:
3% underscan of the effective picture area
Linearity:
Less than 1% within circle centered on the
screen with a diameter equal to the vertical
height, 2% at any other point
Color temperature:
D65/D93/COL 1/COL 2 (User adjustable)
Convergence:
Less than 0.4 mm within circle centered on
the screen with a diameter equal to the
vertical height, 0.5 mm at any other point
Preset brightness:
120 cd/m2 (35 fL) (when a 1.0 Vp-p 100%
white signal is input)

Raster size stability:
1% of picture height (at 120 cd/m2 peak
luminescence, 10 to 90% APL)

Scan delay:
Horizontal: approx. 1/4 line
Vertical: approx. 1/2 field

Center resolution:
4:3: 800 TV lines, 16:9: 600 TV lines

Operating conditions

Operating temperature:
0 to 35 °C (32 to 95°F)
Optimum operating range 20 to 30 °C (68
to 86 °F)
Storage temperature:
-10 to 40 °C (14 to 104 °F)

Humidity:
0 to 90% (no condensation)

Regulation compliance

EN 60950 (TUV GS), CE: EN 55103-1+EN
55103-2+EN 60950

* Including all protruding parts.

BVM-D14H5E Color Video Monitor

Features

14-inch digital color picture monitor *Stand-alone design with integral control unit *HR Trinitron CRT provides a high resolution of 800/600 TV lines (4:3/16:9 modes) *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *Signals with the frequency range of 15.625 to 45 kHz and DTV signals acceptable *Component (YPBPR/GBR) input available as standard *3 slots available for optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Built-in H/V delay, underscan, blue only, mono and 3 color tally functions *Built-in test signal generator *Aspect ratio 4:3 and 16:9 switchable *4:3 area marker *Parallel and serial remote control capability *Mountable into a 19-inch EIA standard rack with the optional rack mount kit

* 13 1/8 inches (4:3)/12 1/8 inches (16:9) viewable area, measured diagonally.



Supplied Accessories

4:3 Mask (1)
AC Cable (1)
AC Plug Holder (1)
Tally Label (1)
Operation Manual (1)

Optional Accessories

BKM-142HD HD SDI Input Adaptor
BKM-120D SD-SDI 4:2:2 Input Adaptor
BKM-127W NTSC/PAL Input Adaptor
BKM-129X Analog Component Input Adaptor
BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-14L Auto Setup Probe
BKM-30E14 Rack Mount Kit
RCC-G Cables 9-pin/9-pin Cable

Specifications

General

Signal format:
15.625 to 45 kHz
Type:
Stand-alone monitor
Power requirements:
100 to 240 V AC $\pm 10\%$, 50/60 Hz
Power consumption:
100 W (with options: max. 115 W)
Dimensions*:
482 (W) x 280 (H) x 562 (D) mm
(19 x 11 1/8 x 22 1/4 inches)
Mass:
Approx. 23 kg (50 lb 10 oz)
CRT
CRT type:
14-inch HR Trinitron
AG pitch:
0.25 mm, 90° deflection, $\phi 29.4$ mm
in-line gun
Phosphor:
EBU
Effective picture size
16:9:
267.5 (W) x 150.5 (H) mm, 306.9
mm (diagonal)
(10 5/8 x 6 inches, 12 1/8 inches)

4:3:

267.5 (W) x 200.6 (H) mm, 331.6
mm (diagonal)
(10 5/8 x 8 inches, 13 1/8 inches)

Inputs/outputs

Video:
Loop-through BNC, automatic 75 Ω
termination
GBR:
1.0 Vp-p ± 6 dB, positive
Y:
1.0 Vp-p ± 6 dB, high impedance
PB/PR:
0.7 Vp-p ± 6 dB, high impedance
External sync:
Loop-through BNC, automatic 75 Ω
termination
Composite:
0.3 to 8.0 Vp-p, high impedance,
tri-level bipolar sync
Remote
Option:
RS-232C for BKM-11R, Mini DIN 8-pin
Control unit:
Not applicable
Remote 1/Serial remote:
RS-485 serial interface, D-sub 9-pin,
with loop-through
Remote 2/Parallel remote 1:
D-sub 9-pin (Short to ground)
Parallel remote 2:
Modular connector 6-pin
ISR:
Not applicable

Video signal performance

Differential gain (DG):
Within 5% for luminance from 0 to 100
cd/m²
Differential phase (DP):
Within 5° for luminance from 0 to 100
cd/m²
Frequency response:
48 Hz to 24 MHz +0 dB/-3 dB
DC restoration:
Back porch type, back porch level: within
1% of peak luminance, 10 to 90% APL

Synchronization

Retrace time:
Horizontal: under 3.77 μ s
Vertical: under 650 μ s

Raster and picture performance

Normal scan:
5% overscan of the effective picture area
Underscan:
3% underscan of the effective picture area
Linearity:
Less than 1% within circle centered on the
screen with a diameter equal to the vertical
height, 2% at any other point
Color temperature:
D65/D93/COL 1/COL 2 (User adjustable)
Convergence:
Less than 0.4 mm within circle centered on
the screen with a diameter equal to the
vertical height, 0.5 mm at any other point
Preset brightness:
120 cd/m² (35 fL) (when a 1.0 Vp-p 100%
white signal is input)
Stability of raster size:
1% of picture height (at 120 cd/m² peak
luminance, 10 to 90% APL)
Scan delay:
Horizontal: approx. 1/4 line
Vertical: approx. 1/2 field
Center resolution:
4:3: 800 TV lines, 16:9: 600 TV lines
Operating conditions
Operating temperature:
0 to 35 °C (32 to 95 °F)
Optimum operating range 20 to 30 °C (68
to 86 °F)
Storage temperature:
-10 to 40 °C (14 to 104 °F)
Humidity:
0 to 90% (no condensation)
Regulation compliance
EN 60950 (TUV GS), CE: EN 55103-1+EN
55103-2+EN 60950
* Including all protruding parts.

BVM-D20F1E Color Video Monitor

Features

20-inch digital color master monitor *Modular design with optional separate control unit *HR Trinitron CRT provides a high resolution of 900/700 TV lines (4:3/16:9 modes) *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *Signals with the frequency range of 15.625 to 45 kHz and DTV signals acceptable *Component (YPBPR/GBR) input available as standard *4 slots available for optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Built-in H/V delay, underscan, blue only, mono and tally functions *Built-in test signal generator *Aspect ratio 4:3 and 16:9 switchable *4:3 area marker *Parallel and serial remote control capability *Optional memory card for storage and recall of primary setup data *Mountable into a 19-inch EIA standard rack with the optional rack mount kit *Supported by Sony Interactive Status Reporting (ISR)

* 13 1/8 inches viewable area, measured diagonally.



Supplied Accessories

4:3 Mask (1)
AC Cable (1)
AC Plug Holder (1)
Tally Label (1)
Fuse (1)
Operation Manual (1)

Optional Accessories

BKM-20D SDI 4:2:2 Decoder Adaptor
BKM-21D SDI Multi Decoder Adaptor
BKM-22X SDI Multi Input Expansion Adaptor
BKM-24N NTSC Decoder Adaptor
BKM-25P PAL Decoder Adaptor
BKM-26M PAL-M Decoder Adaptor
BKM-27T Tri-standard Decoder Adaptor
BKM-28X Analog Input Expansion Adaptor
BKM-32H Control Unit Attachment Kit
BKM-41HD HD SDI Input Adaptor
BKM-42HD HD SDI Input Adaptor
BKM-48X HD Analog Input Expansion Adaptor
BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-12Y Memory Card
BKM-14L Auto Setup Probe
BKM-30E20 Rack Mount Kit
MB-510 Mounting Attachment
RCC-G Cables 9-pin/9-pin Cable

* BKM-12Y is utilized with BKM-10R/11R.

Specifications

General

Signal format:
15.625 to 45 kHz
Type:
Display unit
Power requirements:
100 to 240 V AC $\pm 10\%$, 50/60 Hz
Power consumption:
150 W (with options: max. 210 W)
Dimensions:
444 (W) x 414 (H) x 570 (D) mm
(17 1/2 x 16 3/8 x 22 1/2 inches)

Mass:

Approx. 38 kg (83 lb 10 oz)

CRT

CRT type:
20-inch HR Trinitron
AG pitch:
0.30 mm, 90° deflection, ≈ 30.6 mm
in-line gun
Phosphor:
EBU
Effective picture size:
16:09
386 (W) \times 218 (H) mm, 443 mm
(diagonal)
(15 1/4 \times 8 5/8 inches, 17 1/2 inches)
4:03
386 (W) \times 291 (H) mm, 482 mm
(diagonal)
(15 1/4 \times 11 1/2 inches, 19 inches)
(10 5/8 \times 8 inches, 13 1/8 inches)

Inputs/outputs

Video:
Loop-through BNC
GRB
1.0 Vp-p ± 6 dB, positive
Y:
1.0 Vp-p ± 6 dB, positive, high
impedance
PB/PR:
0.7 Vp-p ± 6 dB, high impedance
External sync:
Loop-through BNC
Composite:
0.3 to 8.0 Vp-p, high impedance,
tri-level bipolar sync
Remote
Option:
RS-232C for BKM-11R, Mini DIN 8-pin
Control unit:
RS-422 for BKM-10R, D-sub 9-pin

Remote 1/Serial remote:

RS-485 serial interface, D-sub 9-pin,
with loop-through

Remote 2/Parallel remote 1:

D-sub 9-pin (Short to ground)

Parallel remote 2:

Not Applicable

ISR:

D-sub 9-pin

Video signal performance

Differential gain (DG):

Within 5% for luminance from 0 to
100 cd/m²

Differential phase (DP):

Within 5° for luminance from 0 to
100 cd/m²

Frequency response:

50 Hz to 30 MHz +1 dB/-3 dB

DC restoration:

Back porch type, back porch level:
within 1% of peak luminance,
10 to 90% APL

Synchronization

Retrace time:

Horizontal: under 3.77 μ s
Vertical: under 650 μ s

Raster and picture performance

Normal scan:
5% overscan of the effective picture area

Underscan:
3% underscan of the effective picture area

Linearity:
Less than 0.5% within circle centered on the screen with a diameter equal to the vertical height, 1% at any other point*2

Color temperature:
D65/D93/COL 1/COL 2
(User adjustable)

Convergence:
Less than 0.4 mm within circle centered on the screen with a diameter equal to the vertical height, 0.5 mm at any other point

Preset brightness:
100 cd/m2 (30 fL) (when a 1.0 Vp-p 100% white signal is input)

Raster size stability:
1% of picture height (at 100 cd/m2 peak luminescence, 10 to 90% APL)

Scan delay:
Horizontal: Approx. 3/8 line
Vertical: Approx. 1/2 field

Center resolution:
4:3: 900 TV lines, 16:9: 700 TV lines

Operating conditions

Operating temperature:
0 to 35 °C (32 to 95°F)
Optimum operating range
20 to 30 °C (68 to 86 °F)

Storage temperature:
-10 to 40 °C (14 to 104 °F)

Humidity:
0 to 90% (no condensation)

Regulation compliance

EN 60950 (TUV GS), CE: EN 55103-1+EN 55103-2+EN 60950

*1 Including all protruding parts. *2 1080/60I and 1035/60I only.

BVM-D24E1WE Color Video Monitor

Features

24-inch digital color master monitor *Modular design with optional separate control unit *Flat surface, 16:9 aspect HR Trinitron CRT provides a high resolution of 1000 TV lines *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *Signals with the frequency range of 15.625 to 45 kHz and DTV signals acceptable *Component (YPBPR/GBR) input available as standard *4 slots available for optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Beam landing correction *Digital uniformity *Built-in H/V delay, underscan, blue only, mono and tally functions *Built-in test signal generator *Aspect ratio 16:9 and 4:3 switchable *4:3 area marker *Parallel and serial remote control capability *Optional memory card for storage and recall of primary setup data *Supported by Sony Interactive Status Reporting (ISR)

* 21 7/8 inches (16.9)/17 7/8 (4:3) viewable area, measured diagonally.

Supplied Accessories

AC Cable (1)
AC Plug Holder (1)
Tally Label (1)
Fuse (1)
Operation Manual (1)

Optional Accessories

BKM-20D SDI 4:2:2 Decoder Adaptor
BKM-21D SDI Multi Decoder Adaptor
BKM-22X SDI Multi Input Expansion Adaptor
BKM-24N NTSC Decoder Adaptor
BKM-25P PAL Decoder Adaptor
BKM-26M PAL-M Decoder Adaptor
BKM-27T Tri-standard Decoder Adaptor
BKM-28X Analog Input Expansion Adaptor
BKM-41HD HD SDI Input Adaptor
BKM-42HD HD SDI Input Adaptor
BKM-48X HD Analog Input Expansion Adaptor
BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-12Y Memory Card
BKM-14L Auto Setup Probe
BKM-34H Control Unit Attachment Kit
MB-510 Mounting Attachment
RCC-G Cables 9-pin/9-pin Cable

* BKM-12Y is utilized with BKM-10R/11R.

Specifications

General

Signal format:
15.625 to 45 kHz
Type:
Display unit
Power requirements:
100 to 240 V AC $\pm 10\%$, 50/60 Hz
Power consumption:
155 W (with options: max. 205 W)
Dimensions*1:
565.5 (W) x 436.8 (H) x 587.3 (D) mm
(22 3/8 x 17 1/4 x 23 1/8 inches)
Mass:
Approx. 51 kg (112 lb 3 oz)
CRT
CRT type:
24-inch HR Trinitron (flat surface, 16:9 aspect)
AG pitch:
0.25 mm, 90° deflection, $\phi 29.1$ mm in-line gun

Phosphor:

EBU

Effective picture size

16:9:
482.1 (W) x 271.2 (H) mm, 553.1 mm
(diagonal)
(19 x 10 3/4 inches, 21 7/8 inches)
4:3:
361.6 (W) x 271.2 (H) mm, 452 mm
(diagonal)
(14 1/4 x 10 3/4 inches, 17 7/8 inches)

Inputs/outputs

Video:

Loop-through BNC
GBR:
1.0 Vp-p ± 6 dB, positive
Y:
1.0 Vp-p ± 6 dB, high impedance
PB/PR:
0.7 Vp-p ± 6 dB, high impedance

External sync:

Loop-through BNC
Composite:
0.3 to 8.0 Vp-p, high impedance, tri-level
bipolar sync

Remote

Option:
RS-232C for BKM-11R, Mini DIN 8-pin
Control unit:
RS-422 for BKM-10R, D-sub 9-pin
Remote 1/Serial remote:
RS-485 serial interface, D-sub 9-pin, with
loop-through
Remote 2/Parallel remote 1:
D-sub 9-pin (Short to ground)
Parallel remote 2:
Not applicable
ISR:
D-sub 9-pin

Video signal performance

Differential gain (DG):
Within 5% for luminance from 0 to 100 cd/m2
Differential phase (DP):
Within 5° for luminance from 0 to 100 cd/m2
Frequency response:
50 Hz to 30 MHz +1 dB/-3 dB
DC restoration:
Back porch type, back porch level: within 1% of
peak luminance, 10 to 90% APL

Synchronization

Retrace time:

Horizontal: under 3.77 μ s
Vertical: under 650 μ s

Raster and picture performance

Normal scan:

5% overscan of the effective picture area
Underscan:
3% underscan of the effective picture area

Linearity:

Less than 0.5% within circle centered on the
screen with a diameter equal to the vertical
height, 1% at any other point*2

Color temperature:

D65/D93/COL 1/COL 2 (User adjustable)

Convergence:

Less than 0.4 mm within circle centered on the
screen with a diameter equal to the vertical
height, 0.7 mm at any other point

Preset brightness:

100 cd/m2 (30 fL) (when a 1.0 Vp-p 100% white
signal is input)

Raster size stability:

1% of picture height (at 100 cd/m2 peak
luminescence, 10 to 90% APL)

Scan delay:

Horizontal: approx. 3/8 line
Vertical: approx. 1/2 field

Center resolution:

16:9: 1000 TV lines, 4:3: 1000 TV lines

Operating conditions

Operating temperature:

0 to 35 °C (32 to 95°F)
Optimum operating range 20 to 30 °C
(68 to 86 °F)

Storage temperature:

-10 to 40 °C (14 to 104 °F)

Humidity:

0 to 90% (no condensation)

Regulation compliance

EN 60950 (TUV GS), CE: EN 55103-1+EN
55103-2+EN 60950

*1 Including all protruding parts. *2 1080/60I and
1035/60I only.



BVM-D32E1WE Color Video Monitor

Features

32-inch digital color master monitor *Modular design with optional separate control unit *Flat surface, 16:9 aspect HR Trinitron CRT provides a high resolution of 1000 TV lines *EBU standard phosphors *Beam current feedback circuit for stable color reproduction *Signals with the frequency range of 15.625 to 45 kHz and DTV signals acceptable *Component (YPBPR/GBR) input available as standard *4 slots available for optional input adaptors *Accepts external sync *Auto setup for chroma, phase and white balance *Precise color temperature adjustment with a color analyzer *Beam landing correction *Digital uniformity *Digital convergence *Built-in H/V delay, underscan, blue only, mono and tally functions *Built-in test signal generator *Aspect ratio 16:9 and 4:3 switchable *4:3 area marker *Parallel and serial remote control capability *Optional memory card for storage and recall of primary setup data *Supported by Sony Interactive Status Reporting (ISR)

* 29 5/8 inches (16:9)/24 1/4 inches (4:3) viewable area, measured diagonally.



Supplied Accessories

AC Cable (1)
AC Plug Holder (1)
Tally Label (1)
Fuse (1)
Operation Manual (1)

Optional Accessories

BKM-20D SDI 4:2:2 Decoder Adaptor
BKM-21D SDI Multi Decoder Adaptor
BKM-22X SDI Multi Input Expansion Adaptor
BKM-24N NTSC Decoder Adaptor
BKM-25P PAL Decoder Adaptor
BKM-26M PAL-M Decoder Adaptor
BKM-27T Tri-standard Decoder Adaptor
BKM-28X Analog Input Expansion Adaptor
BKM-41HD HD SDI Input Adaptor
BKM-42HD HD SDI Input Adaptor
BKM-48X HD Analog Input Expansion Adaptor
BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-12Y Memory Card
BKM-14L Auto Setup Probe
RCC-G Cables 9-pin/9-pin Cable

* BKM-12Y is utilized with BKM-10R/11R.

Specifications

General

Signal format:

15.625 to 45 kHz

Type:

Display unit

Power requirements:

100 to 240 V AC $\pm 10\%$, 50/60 Hz

Power consumption:

180 W (with options: max. 235 W)

Dimensions*1:

794 (W) x 556.5 (H) x 694 (D) mm

(31 3/8 x 22 x 27 3/8 inches)

Mass:

Approx. 94 kg (206 lb 13 oz)

CRT

CRT type:

32-inch HR Trinitron (flat surface, 16:9 aspect)

AG pitch:

0.32 to 0.36 mm, 90° deflection, $\phi 29.1$ mm in-line gun

Phosphor:

EBU

Effective picture size

16:9:

655.2 (W) x 368.5 (H) mm, 751.7 mm (diagonal)
(25 7/8 x 14 5/8 inches, 29 5/8 inches)

4:3:

491.3 (W) x 368.5 (H) mm, 614.1 mm (diagonal)
(19 3/8 x 14 5/8 inches, 24 1/4 inches)

Inputs/outputs

Video:

Loop-through BNC

GBR:

1.0 Vp-p ± 6 dB, positive

Y:

1.0 Vp-p ± 6 dB, high impedance

PB/PR:

0.7 Vp-p ± 6 dB, high impedance

External sync:

Loop-through BNC

Composite:

0.3 to 8.0 Vp-p, high impedance, tri-level bipolar sync

Remote

Option:

RS-232C for BKM-11R, Mini DIN 8-pin

Control unit:

RS-422 for BKM-10R, D-sub 9-pin

Remote 1/Serial remote:

RS-485 serial interface, D-sub 9-pin, with loop-through

Remote 2/Parallel remote 1:

D-sub 9-pin (Short to ground)

Parallel remote 2:

Not applicable

ISR:

D-sub 9-pin

Video signal performance

Differential gain (DG):

Within 5% for luminance from 0 to 70 cd/m²

Differential phase (DP):

Within 5° for luminance from 0 to 70 cd/m²

Frequency response:

50 Hz to 30 MHz +1 dB/-3 dB

DC restoration:

Back porch type, back porch level: within

1% of peak luminance, 10 to 90% APL

Synchronization

Retrace time:

Horizontal: under 3.77 μ s

Vertical: under 650 μ s

Raster and picture performance

Normal scan:

5% overscan of the effective picture area

Underscan:

3% underscan of the effective picture area

Linearity:

Less than 1% within circle centered on the screen with a diameter equal to the vertical height, 2% at any other point*2

Color temperature:

D65/D93/COL 1/COL 2 (User adjustable)

Convergence:

Less than 0.5 mm within circle centered on the screen with a diameter equal to the vertical height, 0.8 mm at any other point

Preset brightness:

70 cd/m² (30 fL) (when a 1.0 Vp-p 100% white signal is input)

Raster size stability:

1% of picture height (at 70 cd/m² peak luminescence, 10 to 90% APL)

Scan delay:

Horizontal: approx. 3/8 line

Vertical: approx. 1/2 field

Center resolution:

16:9: 1000 TV lines, 4:3: 1000 TV lines

Operating conditions

Operating temperature:

0 to 35 °C (32 to 95 °F)

Optimum operating range 20 to 30 °C (68 to 86 °F)

Storage temperature:

-10 to 40 °C (14 to 104 °F)

Humidity:

0 to 90% (no condensation)

Regulation compliance

EN 60950 (TUV GS), CE: EN 55103-1+EN 55103-2+EN 60950

*1 Including all protruding parts. *2 1080/60I and 1035/60I only.

BVM-F24E CineAlta Color Video Monitor

Features

24-inch CineAlta color video monitor *Supports various formats signals: 1080/24P, 24PsF; 1080/25P, 25PsF; 1080/50i, 60i (Alternate scan display. Frame rate is also compatible with 1/1.001.); 1080/50P, 60P etc. *Built in HD-SDI decoder and frame converter for HD-SDI input to eliminate flicker *Dual link HD-SDI inputs: 1080/24P (4:4:4), 1080/60i (4:4:4), 1080/60P (4:2:2) etc. *SXGA Format Signal Support (frame rate: 75 Hz and 85 Hz) *Equipped with various area makers supported the film aspect ratios *16:9 aspect ratio Flat surface HR Trinitron CRT *Resolution: 1000TV lines *Phosphor: SMTPE-C*On Screen Menu for adjustment and operation*Auto white balance function*Built-in various circuits of Beam landing, Digital uniformity and Digital convergence*Separate control unit (BKM-10R/11R)*Setup and adjustment with Memory card*Built-in test signal generator for crosshatch, 100% white signal, 20% gray signal, gray scale, and PLUGE (Picture Line Up Generating Equipment)*Pulse cross function for simultaneous checking of the horizontal and vertical synchronization signals

*24-inch or 23-inch viewable area, measured diagonally.



Optional Accessories

BKM-10R Monitor Control Unit
BKM-11R Monitor Control Unit
BKM-12Y Memory Card
BKM-34H Control Unit Attachment Kit
BKM-14L Auto Setup Probe

Specifications

General

Signal format:

54 kHz to 91.1 kHz

Type:

Display unit

Power requirements:

100 to 240 V AC $\pm 10\%$, 50/60 Hz

Power consumption:

225 W

Dimensions*1:

565.5 (W) x 436.8 (H) x 609.3 (D) mm
(22 3/8 x 17 1/4 x 24 1/8 inches)

Mass:

Approx. 54 kg (119 lb 1 oz)

CRT

CRT type:

24-inch HR Trinitron

AG pitch:

0.25 mm to 0.28 mm, 90° deflection, $\phi 29.1$ mm in-line gun

Phosphor:

EBU

Effective picture size

16:9:

482.1 (W) x 271.2 (H) mm, 553.1 mm
(diagonal)
(19 x 10 3/4 inches, 21 7/8 inches)

4:3:

361.6 (W) x 271.2 (H) mm, 452 mm
(diagonal)
(14 1/4 x 10 3/4 inches, 17 7/8 inches)

Inputs/outputs

Video:

RGB:

BNC type x3 (75 Ω), 0.7 Vp-p (1 Vp-p, Sync on Green) +3 dB/-6 dB, sync positive

HD-SDI (*Single link (4:2:2), Dual link (4:2:2),

Dual link (4:4:4):

BNC type x 2 (75 Ω) with monitor out, 1.485 Gbps (Data rate), 75 Ω unbalance (Impedance), Single Link Mode (Line1 or Line2): 2 inputs, Dual Link Mode (Link A and Link B): 1 input, *Delay time range between Link A and Link B: Within $\pm 1/2$ H

External sync:

BNC type x 2 (75 Ω)

Composite:

0.3 to 5.0 Vp-p, positive/negative tri-level sync signal input or negative bi-level sync signal input

Separate HS/VS:

0.3 to 5.0 Vp-p, positive sync/negative sync (Auto Selection)

Remote

Option:

RS-232C for BKM-11R, Mini DIN 8-pin

Control unit:

RS-422 for BKM-10R, D-sub 9-pin

Remote 1/Serial remote:

RS-485 serial interface, D-sub 9-pin, with loop-through

Remote 2/Parallel remote 1:

D-sub 9-pin x 1 (Short to ground)

ISR:

D-sub 9-pin (x 1)

Video signal performance

Frequency response:

48 Hz to 60 MHz +1dB/-3dB (x 2, Pseudo Display), 48 Hz to 90 MHz +1dB/-3dB (x 3)

Matrix:

ITU-709

DC restoration:

Black level fluctuation: less than 1% for 10 to 90% APL input signal variation

Synchronization

Retrace time:

Horizontal: Less than 2.49 μ s

Vertical: Less than 333 μ s

Raster and picture performance

Normal scan:

5% overscan of the effective picture area

Underscan:

3% underscan of the effective picture area

Linearity:

Within a central area bounded by a circle with a diameter equal to the picture height, less than 0.5% of the height, and outside the same area, about 1% of the picture height.

Color temperature:

STD (D65)/COL1 (D61)/COL2 (D93), user adjustable

Convergence:

Within a central area bounded by a circle with a diameter equal to the picture height, less than 0.3 mm with a central area bounded by a circle and less than 0.5 mm at any other point.

Preset brightness:

100 cd/m² (30 fL) (when a 1.0 Vp-p 100% white signal is input)

Raster size stability:

Less than 1% of picture height (at 100 cd/m² peak luminescence, 10 to 90% APL)

Scan delay:

Horizontal: Approx. 3/8 line

Vertical: Approx. 1/2 field

Center resolution:

1000 TV lines (16:9)

Operating conditions

Operating temperature:

0 to 35 °C (32 to 95 °F)
Optimum operating range 20 to 30 °C (68 to 86 °F)

Storage temperature:

-10 to 40 °C (14 to 104 °F)

Humidity:

0 to 90% (no condensation)

Regulation compliance

TUV (EN60950), EN55103-1, EN55103-2, PTB, CE, C-tick

LMD-150 LCD Monitor

15-inch 4:3 aspect ratio high-brightness LCD monitor for professional picture monitoring

Features

LCD monitor used in combination with the MEU-WX1 *Multiformat Engine Unit *Superb Picture Performance provides Excellent Brightness and Contrast, and wide viewing angle *AR-Coated protection panel *Slim and lightweight *19-inch EIA standard rack mountable (using MB-524 mounting bracket) *VESA mounting with 75 x 75 mm pitch *Three-Color Tally *Sophisticated X-Algorithm I/P processor *Multiformat LCD monitor



Supplied Accessories

Display interface cable (1)
Operating instructions (1)

Optional Accessories

MB-524 Rack-Mount Bracket
SMF-600 Display IF Cable (10 meters)
SU-558 Monitor Stand

Specifications

- Picture Performance -

Type
a-Si TFT Active Matrix LCD with an AR-coated protection panel
Resolution
1024 x 768 dots
Pixel efficiency
99.99%
Dot pitch
0.297 x 0.297 mm
Picture Size (H x W) (Diagonal)
Approx. 304 x 228 mm
(12 x 9 inches)
15-inch (380 mm)
Aspect
4:03
Colors
16,770,000 colors
Viewing Angle
85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

- Input -

Display Input connector
Digital input
DVI-D
Dot clock
25.175 MHz 65.000 MHz
Scanning Frequency
Horizontal
31.469 kHz 48.363 kHz
Vertical
59.940 Hz 60.004 Hz

- General -

Power Consumption
Approx. 35 W
Power requirement
DC16.5 V /12 V
Operating Temperature
0 to 35 °C (32 to 95 °F)
Operating Humidity
30 to 85% (no condensation)
Storage & Transport Temperature
-10 to 40 °C (14 to 104 °F)
Storage & Transport Humidity
0 to 90%
Operating/Storage/Trans. Pressure
700 to 1060 hPa
Dimensions (W x H x D)
Unit: mm (inches)
379 x 297 x 70 mm *
(15 x 11 2/3 x 2 3/4 inches) *
Mass
Approx. 4.4 Kg (9 lb 11 oz)**
Approx. 9.6 Kg (21 lb 3 oz)***
Supplied Accessories
Display interface cable, Warranty card,
Operating instructions
Regulation Compliance
UL-1950, FCC Class-A, CSA C22.2
No.950 (c-UL), IC Class-A, EN60950,
EN55103-1, EN55103-2, CE , VCCI
Class-A, C-tick
* Without the optional monitor stand and not including the projection parts.
** Without the optional SU-558 monitor stand.
*** With the optional SU-558 monitor stand.

LMD-210 LCD Monitor

21-inch 4:3 screen high-brightness LCD monitor for professional picture monitoring.

Features

*LCD monitor used in combination with the MEU-WX1
 *Superb Picture Performance (AR-Coated Protection Panel, Excellent Brightness and Contrast, Wide Viewing Angle) *Slim, Thin and Lightweight. *19-inch EIA standard rack mountable (using MB-523 mounting bracket) *VESA mounting with 75 x 75 mm pitch
 *Three-Color Tally *Sophisticated X-Algorithm I/P processor *Multiformat LCD monitor



Supplied Accessories

Display interface cable (1)
 Operating instructions (1)

Optional Accessories

SU-558 Monitor Stand
 SMF-600 Display I/F cable (10 meters)
 MB-523 Rack-Mount bracket

Specifications

- Picture Performance -

Type
 a-Si TFT Active Matrix LCD with an AR-coated protection panel
 Resolution
 1024 x 768 dots
 Pixel efficiency
 99.99%
 Dot pitch
 0.420 x 0.420 mm
 Picture Size (H x W)
 (Diagonal)
 Approx. 430 x 323 mm
 (17 x 12 5/7 inches)
 21-inch (537.60 mm)
 Aspect
 4:3
 Colors
 16,770,000 colors
 Viewing Angle
 85°/85°/85°/85° (typical)
 (up/down/left/right contrast>10:1)

- Input -

Display Input connector
 Digital input
 DVI-D
 Dot clock
 25.175 MHz 65.000 MHz
 Scanning Frequency
 Horizontal
 31.469 kHz 48.363 kHz

Vertical
 59.940 Hz 60.004 Hz

- General -

Power Consumption
 Approx. 70 W
 Power requirement
 DC16.5 V
 Operating Temperature
 0 to 35 °C (32 to 95 °F)
 Operating Humidity
 30 to 80% (no condensation)
 Storage & Transport Temperature
 -10 to 40 °C (14 to 104 °F)
 Storage & Transport Humidity
 0 to 80%
 Operating/Storage/Trans. Pressure
 700 to 1060 hPa
 Dimensions (W x H x D)
 Unit: mm (inches)
 515 x 409 x 77 mm *
 (20 3/8 x 16 1/8 x 3 1/8 inches) *
 Mass
 Approx. 7 Kg (15 lb 7 oz)*
 Approx. 12.2 Kg (26 lb 14 oz)**
 Supplied Accessories
 Display interface cable, Warranty card,
 Operating instructions
 Regulation Compliance
 UL-1950, FCC Class-A, CSA C22.2
 No.950 (c-UL), IC Class-A, EN60950,
 EN55103-1, EN55103-2, CE, VCCI
 Class-A, C-tick

* Without the optional monitor stand and not including the projection parts.

** With the optional SU-558 monitor stand.

LMD-171W LCD Monitor

17-inch wide screen high-brightness LCD monitor for professional picture monitoring.

Features

- * LCD monitor used in combination with the MEU-WX1
- *Superb Picture Performance (AR-Coated protection panel, Excellent Brightness and Contrast, Wide Viewing Angle) *Slim and lightweight *19-inch EIA standard rack mountable (using MB-522A mounting bracket)
- *VESA mounting with 75x75mm pitch *Three-Color Tally
- *Sophisticated X-Algorithm I/P processor * Multiformat LCD monitor



Supplied Accessories

- Display interface cable (1)
- Operating instructions (1)

Optional Accessories

- SMF-600 Display IF Cable (10 meters)
- SU-558 Monitor Stand
- MB-522A Rack-Mount Bracket

Specifications

- Picture Performance -

- Type
 - a-Si TFT Active Matrix LCD with an AR-coated protection panel
- Resolution
 - 1280 x 768 dots
- Pixel efficiency
 - 99.99%
- Dot pitch
 - 0.284 x 0.284 mm
- Picture Size (H x W)
 - Approx. 364 x 218 mm
 - (14 3/8 x 8 5/8 inches)
- Diagonal)
 - 17-Inch (424 mm)
- Aspect
 - 15:09
- Colors
 - 16,770,000 colors
- Viewing Angle
 - 85°/85°/85°/85° (typical)
 - (up/down/left/right contrast>10:1)

- Input -

- Display Input connector
 - Digital input
 - DVI-D
- Dot clock
 - 25.175 MHz
 - 68.250 MHz
- Scanning Frequency
 - Horizontal
 - 31.469 kHz
 - 47.396 kHz
 - Vertical
 - 59.941 Hz
 - 59.995 Hz

- General -

- Power Consumption
 - Power requirement
 - DC 16.5 V/12V
- Operating Temperature
 - 0 to 35°C (32 to 95°F)
- Operating Humidity
 - 30 to 80% (no condensation)
- Storage & Transport Temperature
 - 10 to 40°C (14 to 104°F)
- Storage & Transport Humidity
 - 0 to 90%
- Operating/Storage/Trans. Pressure
 - 700 to 1060 hPa
- Dimensions (W x H x D)
 - 441 x 294 x76 mm*
 - 17 3/8 x 11 5/8 x 3 inches*
- Mass
 - Approx. 4.7 Kg (10 lb 6 oz)**
 - Approx. 9.9 Kg (21 lb 13 oz)***
- * without the optional monitor stand and not including the projection parts
- ** without the optional SU-558 monitor stand.
- *** with the optional SU-558 monitor stand.

LMD-230W LCD Monitor

23-inch wide screen high-brightness LCD monitor for professional picture monitoring.

Features

- * LCD monitor used in combination with the MEU-WX1
- *Superb Picture Performance (AR-Coated protection panel, Excellent Brightness and Contrast, Wide Viewing Angle)
- *Slim and lightweight
- *VESA mounting with 75x75mm pitch
- *Three-Color Tally
- *Sophisticated X-Algorithm I/P processor
- * Multiformat LCD monitor



Supplied Accessories

- Display interface cable (1)
- Operating instructions (1)

Optional Accessories

- SU-558 Monitor Stand
- SMF-600 Display IF Cable (10 meters)

Specifications

- Picture Performance -

- Type
 - a-Si TFT Active Matrix LCD with an AR-coated protection panel
- Resolution
 - 1280 x 768 dots
- Pixel efficiency
 - 99.99%
- Dot pitch
 - 0.3915 x 0.3915 mm
- Picture Size (H x W) (Diagonal)
 - Approx. 501 x 301 mm (19 3/4 x 11 7/8 inches)
 - 23-inch (584.40 mm)
- Aspect
 - 15:9
- Colors
 - 16,770,000 colors
- Viewing Angle
 - 85°/85°/85°/85° (typical)
 - (up/down/left/right contrast>10:1)

- Input -

- Display Input connector
- Digital input
 - DVI-D
- Dot clock
 - 25.175 MHz 68.250 MHz

Scanning Frequency

- Horizontal
 - 31.469 kHz 47.396 kHz
- Vertical
 - 59.940 Hz 59.995 Hz

- General -

- Power Consumption
 - Approx. 62 W
- Power requirement
 - DC 16.5 V
- Operating Temperature
 - 0 to 35 °C (32 to 95 °F)
- Operating Humidity
 - 30 to 80% (no condensation)
- Storage & Transport Temperature
 - 10 to 40 °C (14 to 104 °F)
- Storage & Transport Humidity
 - 0 to 80%
- Operating/Storage/Trans. Pressure
 - 700 to 1060 hPa
- Dimensions (W x H x D)
 - 563 x 372 x 78 mm *
 - (22 1/4 x 14 3/4 x 3 1/8 inches) *
- Mass
 - Approx. 6.6 Kg (14 lb 9 oz)*
 - Approx. 11.8 Kg (26 lb)**
- Supplied Accessories
 - Display interface cable, Warranty card, Operating instructions
- Regulation Compliance
 - UL-1950, FCC Class-A, CSA C22.2 No.950 (c-UL), IC Class-A, EN60950, EN55103-1, EN55103-2, CE , VCCI Class-A, C-tick
- * Without the optional monitor stand and not including the projection parts.
- ** With the optional SU-558 monitor stand.

LMD-320W LCD Monitor

32-inch wide screen high-brightness LCD monitor for professional picture monitoring.

Features

- *LCD monitor used in combination with the MEU-WX1
- *Superb Picture Performance (AR-Coated protection panel, Excellent Brightness and Contrast, Wide Viewing Angle)
- *Slim, thin and lightweight
- *Sophisticated X-Algorithm I/P processor
- *Multiformat LCD monitor



Specifications

Supplied Accessories

- Display interface cable (1)
- Operating instructions (1)

Optional Accessories

- SMF-600 Display I/F cable (10 meters)
- SU-559 mobile monitor stand

- Picture Performance -

- Type
 - a-Si TFT Active Matrix LCD with an AR-coated protection panel
- Resolution
 - 1280 x 768 dots
- Pixel efficiency
 - 99.99%
- Dot pitch
 - 0.537 x 0.537 mm
- Picture Size (H x W)
 - Approx. 687 x 412 mm
- (Diagonal)
 - (27 x 16 2/9 inches)
 - 32-inch (801.59 mm)
- Aspect
 - 15:9
- Colors
 - 16,770,000 colors
- Viewing Angle
 - 85°/85°/85°/85° (typical)
 - (up/down/left/right contrast>10:1)

- Input -

- Display Input connector
- Digital input
 - DVI-D
- Dot clock
 - 25.175 MHz 68.250 MHz
- Scanning Frequency
- Horizontal
 - 31.469 kHz 47.396 kHz
- Vertical
 - 59.940 Hz 59.995 Hz

- General -

- Power Consumption
 - Approx. 150 W
- Power requirement
 - AC 100 to 240 V \pm 10%, 50/60 Hz
- Operating Temperature
 - 0 to 35 °C (32 to 95 °F)
- Operating Humidity
 - 30 to 80% (no condensation)

Storage & Transport Temperature

-10 to 40 °C (14 to 104 °F)

Storage & Transport Humidity

0 to 80%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

790 x 512 x 94 mm *

(31 1/8 x 20 1/4 x 3 3/4 inches) *

Mass

Approx. 25 Kg (55 lb 2 oz)*

Supplied Accessories

- AC cord, AC plug holder, Display interface cable, Warranty card, Operating instructions

Regulation Compliance

- UL-1950, FCC Class-A, CSA C22.2 No.950 (c-UL), IC Class-A, EN60950, EN55103-1, EN55103-2, CE, VCCI Class-A, C-tick

* Without the optional monitor stand and not including the projection parts.

MEU-WX1 Multiformat Engine Unit

Multiformat Engine Unit for use with LMD Series

Features

- * Signal processing unit used with the LMD-150, LMD-171W, LMD-210, LMD-230W, LMD-320W
- * Accepts RGB, analog component, Composite, S-Video signals as standard. Accepts SD-SDI signals, HD-SDI and DV signals by use of the appropriate optional input adaptor
- * Lightweight
- * Multiple operating functions
- * 19-inch EIA standard rack mountable
- * Assignable Parallel remote control



Supplied Accessories

- Screw (4)
- CD-ROM (1)
- CD-ROM manual (1)
- AC plug holder (1)
- AC cord (1)
- Operating manuals (1)
- Mounting bracket (for MEU) (1)

Optional Accessories

- BKM-220D SDI 4:2:2 Input Adaptor
- BKM-243HS HD SDI&SDI Input Adaptor
- BKM-255DV DV input Adaptor

Specifications

Input/Output

Input

- Connector/Slot
- Composite/Y/G:
 - Loop through BNC (x1) Automatic
 - 75 Ω termination
 - Composite
 - 1.0 Vp-p sync negative
 - Component
 - 0.7 Vp-p
 - RGB
 - 0.7 Vp-p Sync on G 0.3Vp-p
- S-Y/YB/B:
 - Loop through BNC (x1) Automatic
 - 75 Ω termination
 - Y/C
 - 1.0 Vp-p sync negative
 - Component
 - 0.7 Vp-p
 - RGB
 - 0.7 Vp-p
- S-C/YR/R:
 - Loop through BNC (x1) Automatic
 - 75 Ω termination
 - Y/C
 - 0.286 Vp-p (NTSC), 0.00.3 Vp-p (PAL)
 - Component
 - 0.7 Vp-p
 - RGB
 - 0.7 Vp-p
- Audio in (for Video signals):
 - Stereo mini jack (x1), -5 dBu, more than 47 k Ω
- OPTION A-1, OPTION A-2:
 - Option Slot (x1)
- OPTION B-1, OPTION B-2:
 - Option Slot (x1)

Ext. sync:

- Loop through BNC (x1) automatic
- 75 Ω termination,
- 0.3 ~ 8 Vp-p +/-6dB, sync negative,
- usable tri-level sync signal
- 0.6 Vp-p +/-6dB

Computer:

- HD D-sub 15-pin (female) (x1),
- 0.7 Vp-p, 75 Ω , positive (R,G,B)

Audio in (for computer signals):

- Stereo mini jack (x1), -5dBu, more than 47 k Ω

DC IN*:

- XLR 4-pin (male) (x1), 12 V output
- impedance 0.05 Ω or less

Output

Audio monitor out:

- Stereo mini jack (x1), -5 dBu, more than 47 k Ω

Speaker Out:

- Stereo (0.5 W + 0.5 W)

PARALLEL Remote:

- Modular 8-pin connector
- (Assignable)

Display Signal Out:

- Exclusive connector(x1)

Display DC Out*:

- XLR 4-pin connector (female) (x1),
- 16.5 V

Video

Horizontal Scanning Frequency:

- 15 to 45 kHz

Frame Scanning Frequency:

- 48 to 60 Hz

Computer

Dot clock:

- 100 MHz

Horizontal Scanning Frequency:

- 29 to 69 kHz

Vertical Scanning Frequency (frame):

- 60 to 85 Hz

Plug & Play:

- DDC-2B

General

Power consumption

Maximum:

- 92 W (with 1 x LMD-230 and 2 x BKM-243HS)

Standard:

- 23 W (without optional input adaptor)

Power requirement:

- AC 100 to 240 V +/-10%, 50/60 Hz

Operating Temperature:

- 0 to 35 °C (32 to 95 °F)

Storage and Trans. Temperature:

- 10 to 40 °C (14 to 104 °F)

Operating Humidity:

- 30 to 85 %

Storage & Transport Humidity:

- 0 to 90 %

Operating/Storage/Trans. Pressure:

- 700 to 1060 hPa

Dimensions (W x H x D) excluding protrusions:

- 434 x 44 x 305 mm (17 1/8 x 1 3/4 x 12 1/8 inches)

Mass:

- 4.5 Kg (9 lb 15 oz)**

*When operating this system with DC power, the MEU-WX1 supplies power to the LMD-170W; however, the LMD-230W requires 16.5 V DC to be applied directly to the monitor. **Excluding supplied accessories

LMD-1410 LCD Monitor

14-inch 4:3 aspect high-brightness LCD monitor for professional picture monitoring.

Features

*Precise reproduction of interlace SD images *Excellent Brightness and Contrast *Faithful color reproduction
 *Lightweight and thin *Full range of analog SD input capability *19-inch EIA rack mountable (using MB-526 mounting bracket) *VESA 100 x 100 pitch spacings
 *Supplied monitor stand *Operational features inherited from Sony PVM monitors. * Normal scan and Under scan mode * Assignable parallel remote control

Supplied Accessories

AC power cord x 1
 AC plug holder x 2
 CD-ROM x 1
 Using the CD-ROM Manual x 1

Optional Accessories

MB-526 Mounting Bracket



Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.443(H) x 0.443(V) mm

Picture Size (H x W)

Approx. 283 x 212mm
 (Diagonal) 354mm (14 inch)
 Aspect
 4:3

Colors

Approx. 16,200,000 colors

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast
 >10:1 typical)

Input

Line A

Composite

BNC type x1
 1.0Vp-p±3dB 75Ω terminated sync
 0.3 Vp-p negative

Y/C

DIN 4 pin x 1
 Y: 1.0Vp-p±3dB 75Ω terminated,
 C: 0.286Vp-p±3dB(NTSC),
 0.3Vp-p±3dB (PAL) 75Ω terminated,
 sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync
 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

RGB/Component

RGB/Component BNC type x 3
 0.7Vp-p±3dB 75Ω terminated
 Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1
 -5dBu 47kilohms or higher

Remote

Parallel remote
 Modular 8-pin (Assignable)

Output

Line A

Composite BNC type x 1
 Loop-through, with 75Ω automatic terminal
 function

Y/C

DIN 4 pin x 1
 Loop-through, with 75Ω automatic
 terminal function

Audio in

RCA pin x 1
 Loop-through

Line B

Composite
 BNC type x 1
 Loop-through, with 75Ω automatic
 terminal function

Audio in

RCA pin x 1
 Loop-through

RGB/Component

RGB/Component
 BNC type x 3

Loop-through, with 75Ω automatic
 terminal function

Audio in

RCA pin x 1
 Loop-through

Speaker power

0.5W monaural

General

Power Consumption

Approx. 48W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 343 x 354 x 264 mm

Dimension without stand

Approx. 343 x 304 x 87 mm

Mass

Panel & Stand

Approx. 6.5 kg

Panel only

Approx. 4.8 kg



LMD-1420 LCD Monitor

14-inch 4:3 aspect high-brightness LCD monitor for professional picture monitoring.

Features

*Precise reproduction of interlace SD images *Excellent brightness and contrast *Faithful color reproduction *Lightweight and thin *Full range of analog SD input capability *Digital SD-SDI input capability with the use of the optional BKM-320D *19-inch EIA rack mountable (using MB-526 mounting bracket) *VESA 100 x 100 pitch spacings *Supplied monitor stand *Operational features inherited from Sony PVM monitors. * AR-Coated protection panel * Normal scan and Under scan mode * Assignable parallel remote control

Supplied Accessories

AC power cord x 1
AC plug holder x 2
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-526 Mounting Bracket
BKM-320D SDI 4:2:2 input Adaptor

Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD with an
AR-coated protection panel

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.443(H) x 0.443(V) mm

Picture Size

(H x W) Approx. 283 x 212mm

(Diagonal) 354mm (14 inch)

Aspect

4:3

Colors

Approx. 16,200,000 colors

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast

>10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated,

sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kilohms or higher

Option

D1-SDI

D-sub 9-pin x 1

Audio in

RCA pin x 1 -5dBu 47kilohms or higher

External Sync

BNC type x 1

Remote

Parallel remote

Modular 8-pin (Assignable)

TALLY

Controlled through parallel remote

(Modular 8-pin) **Output**

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal

function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic

terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic

terminal function

Audio in

RCA pin x 1

Loop-through



RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

External Sync

BNC type x 1 Loop-through

with 75 Ω automatic terminal function

Speaker power

0.5W monaural

General

Power Consumption

Approx. 51W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 343 x 354 x 264 mm

Dimension without stand

Approx. 343 x 304 x 87 mm

Mass

Panel & Stand

Approx. 6.8 kg

Panel only

Approx. 5.1 kg

LMD-2010 LCD Monitor

20-inch 4:3 aspect high-brightness LCD monitor
for professional picture monitoring.

Features

*Precise reproduction of interlace SD images *Excellent Brightness and Contrast *Faithful color reproduction
*Lightweight and thin *Full range of analog SD input capability *19-inch EIA rack mountable (using MB-527 mounting bracket) *VESA 100 x 100 pitch spacings
*Supplied monitor stand *Operational features inherited from Sony PVM monitors. * Normal scan and Under scan mode * Assignable parallel remote control

Supplied Accessories

AC power cord x 1
AC plug holder x 2
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-527 Mounting Bracket

Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.213(H) x 0.638(V) mm

Picture Size

(H x W) Approx. 408 x 306mm

(Diagonal) 510mm (20.1 inch)

Aspect

4:3

Colors

Approx. 16,700,000 colors

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast
>10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated,

sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kilohms or higher

Remote

Parallel remote

Modular 8-pin (Assignable)

Output

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Speaker power

0.5W monaural

General

Power Consumption

Approx. 84W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 470 x 441 x 264 mm

Dimension without stand

Approx. 470 x 394 x 87mm

Mass

Panel & Stand

Approx. 8.7 Kg

Panel only

Approx. 7.0 kg



LMD-2020 LCD Monitor

20-inch 4:3 aspect high-brightness LCD monitor
for professional picture monitoring.

Features

*Precise reproduction of interlace SD images *Excellent Brightness and Contrast *Faithful color reproduction
*Lightweight and thin *Full range of analog SD input capability *Digital SD-SDI input capability with the use of the optional BKM-320D *19-inch EIA rack mountable (using MB-527 mounting bracket) *VESA 100 x 100 pitch spacings *Supplied monitor stand *Operational features inherited from Sony PVM monitors * AR-Coated protection panel * Normal scan and Under scan mode
* Assignable parallel remote control

Supplied Accessories

AC power cord x 1
AC plug holder x 2
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-527 Mounting Bracket
BKM-320D SDI 4:2:2 input adaptor



Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD with an
AR-coated protection panel

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.213(H) x 0.638(V) mm

Picture Size

(H x W) Approx. 408 x 306mm
(Diagonal) 510mm (20.1 inch)

Aspect

4:3

Colors

Approx. 16,700,000 colors

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast
>10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated,

sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kilohms or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kilohms or higher

Option

D1-SDI

D-sub 9-pin x 1

Audio in

RCA pin x 1 -5dBu 47kilohms or higher

External Sync

BNC type x 1

Remote

Parallel remote

Modular 8-pin (Assignable)

TALLY

Controlled through parallel remote

(Modular 8-pin)

Output

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic

terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic

terminal function

Audio in

RCA pin x 1

Loop-through

RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

External Sync

BNC type x 1 Loop-through

with 75Ω automatic terminal function

Speaker power

0.5W monaural

General

Power Consumption

Approx. 87W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 470 x 441 x 264 mm

Dimension without stand

Approx. 470 x 394 x 87mm

Mass

Panel & Stand

Approx. 9.2 kg

Panel only

Approx. 7.5 kg

LMD-4420 Multiple LCD Monitor

Features

Quad screen 4-inch 4:3 aspect ratio high-brightness LCD monitor *4-inch 4:3 aspect ratio LCD panels (x4) *High picture quality provided by high brightness, high contrast, wide viewing angle panels *19-inch EIA standard rack mountable *SDI input (using BKM-320D optional input adaptor) *Low power consumption *Slim and Light *3-step tilt

Supplied Accessories

AC power adaptor (1)
AC power cord (1)
AC plug holder (1)
Screws for AC adaptor holder (2)
Operating Instructions (1)

Optional Accessories

BKM-320D SDI 4:2:2 Input adaptor



Specifications

LCD Panel

Type
a-Si TFT Active Matrix LCD

Resolution
480 x 234 dots

Pixel efficiency
99.99%

Picture Size (H x W)
Approx. 82.1 x 61.8 mm (3 1/4 x 2 1/2 inches)

Diagonal
4 1/8 inches (102.8 mm)

Aspect
4:03

Colors
Full color

Viewing Angle
50°/30°/50°/50°(typical)
(up/down/left/right contrast>10:1)

Input / Output

Composite
Input
BNC (x 4)
1.0 Vp-p \pm 2 dB, sync negative

Output
BNC (x 4), Loop through Automatic 75 Ω termination

OPTION IN
D-sub 9pin connector (x4)

Remote
Parallel
Modular 8 pin (x4)

General

Power Consumption
Maximum: Approx. 26 W (with 4 x BKM-320D)
Standard: Approx. 18 W (without optional input adaptor)

Power Requirement
12V DC (with the supplied AC power adaptor)
AC power adaptor: AC 100 to 240 V, 50/60 Hz

Peak inrush current
(1) Power on, current probe method:35A (230V)
(2) Hot switching inrush current, measured in accordance with European standard EN55103-1:8A (230V)

Operating Temperature
0 to 35°C (32 to 95° F)

Operating Humidity
30 to 85 % (no condensation)

Storage & Transport Temperature
-10 to 40°C (14 to 104° F)

Storage & Transport Humidity
0 to 90 %

Operating / Storage / Trans. Pressure
700 hPa to 1060 hPa

Dimensions (W x H x D)(inches)
482 x 88.1 x 47 (19 x 3 1/2 x 1 7/8)*¹
With AC adaptor and BKM-320D:
482 x 88.1 x 116 (19 x 3 1/2 x 4 5/8)

Mass
Approx. 1.9 Kg (4 lb 3 oz)*²

*¹ Without projecting parts.
*² Excluding supplied accessories.

LMD-5320 Multiple LCD Monitor

Features

Triple screen 5.6-inch 4:3 aspect ratio high-brightness LCD monitor *5.6-inch 4:3 aspect ratio LCD panels (x3)
*High picture quality provided by high brightness, high contrast, wide viewing angle panels *19-inch EIA standard rack mountable *SDI input (using BKM-320D optional input adaptor) *Low power consumption *Slim and Light *5-step tilt

Supplied Accessories

AC power adaptor (1)
AC power cord (1)
AC plug holder (1)
Screws for AC adaptor holder (2)
Operating Instructions (1)

Optional Accessories

BKM-320D SDI 4:2:2 Input adaptor



Specifications

LCD Panel

Type
a-Si TFT Active Matrix LCD
Resolution
320 x 234 dots
Pixel efficiency
99.99%
Picture Size (H x W)
Approx. 113 x 85 mm (4 1/2 x 3 3/8 inches)
Diagonal
5 5/8 inches (142.24 mm)
Aspect
4:03
Colors
Full color
Viewing Angle
50°/30°/50°/50°(typical)
(up/down/left/right contrast>10:1)

Input / Output

Composite
Input
BNC (x 3)
1.0 Vp-p ± 2 dB, sync negative
Output
BNC (x 3), Loop through Automatic 75 Ω termination
OPTION IN
D-sub 9pin connector (x3)
Remote
Parallel
Modular 8 pin (x3)

General

Power Consumption
Maximum: Approx. 28 W
(with 3 x BKM-320D)
Standard:
Approx. 22 W (without optional input adaptor)
Power Requirement
12V DC (with the supplied AC power adaptor)
AC power adaptor: AC 100 to 240 V, 50/60 Hz
Peak inrush current
(1) Power on, current probe method:55A (230V)
(2) Hot switching inrush current, measured
in accordance with European standard
EN55103-1:8A (230V)
Operating Temperature
0 to 35°C (32 to 95° F)
Operating Humidity
30 to 85 % (no condensation)
Storage & Transport Temperature
-10 to 40°C (14 to 104° F)
Storage & Transport Humidity
0 to 90 %
Operating / Storage / Trans. Pressure
700 hPa to 1060 hPa
Dimensions (W x H x D)(inches)
482 x 88.1 x 47 mm (19 x 3 1/2 x 1 7/8)*¹
With AC adaptor and BKM-320D:
482 x 88.1 x 116 mm (19 x 3 1/2 x 4 5/8)
Mass
Approx. 2.3Kg (5 lb 1 oz)*²

*¹ Without projecting parts.
*² Excluding supplied accessories.

LMD-7220W Multiple LCD Monitor

Features

Dual screen 7-inch 16:9 aspect ratio high-brightness LCD monitor *7-inch 16:9 aspect ratio LCD panels (x2)
*Selectable Aspect Ratio (between 16:9 and 4:3) *High picture quality provided by high brightness, high contrast, wide viewing angle panels *19-inch EIA standard rack mountable *SDI input (using BKM-320D optional input adaptor) *Low power consumption *Slim and Light *5-step tilt

Supplied Accessories

AC power adaptor (1)
AC power cord (1)
AC plug holder (1)
Screws for AC adaptor holder (2)
Operating Instructions (1)

Optional Accessories

BKM-320D SDI 4:2:2 Input adaptor



Specifications

LCD Panel

Type
a-Si TFT Active Matrix LCD
Resolution
480 x 234 dots
Pixel efficiency
99.99%
Picture Size (H x W)
Approx. 154.1 x 86.6 mm (6 1/8 x 3 1/2 inches)
Diagonal
7 inches (176.7 mm)
Aspect
16:09
Colors
Full color
Viewing Angle
40°/65°/65°/65°(typical)
(up/down/left/right contrast>10:1)

Input / Output

Composite
Input
BNC (x 2)
1.0 Vp-p \pm 2 dB, sync negative
Output
BNC (x 2), Loop through Automatic 75 Ω termination
OPTION IN
D-sub 9pin connector (x2)
Remote
Parallel
Modular 8 pin (x2)

General

Power Consumption
Maximum: Approx. 68 W
(with 2 x BKM-320D)
Standard:
Approx. 23 W (without optional input adaptor)
Power Requirement
12V DC (with the supplied AC power adaptor)
AC power adaptor: AC 100 to 240 V, 50/60 Hz
Peak inrush current
(1) Power on, current probe method: 57A (230V)
(2) Hot switching inrush current, measured in accordance with European standard
EN55103-1:8A (230V)
Operating Temperature
0 to 35°C (32 to 95° F)
Operating Humidity
30 to 85 % (no condensation)
Storage & Transport Temperature
-10 to 40°C (14 to 104° F)
Storage & Transport Humidity
0 to 90 %
Operating / Storage / Trans. Pressure
700 hPa to 1060 hPa
Dimensions (W x H x D)(inches)
482 x 133 x 47 (19 x 5 1/4 x 1 7/8)*1
With AC adaptor and BKM-320D:
482 x 133 x 116 (19 x 5 1/4 x 4 5/8)
Mass
Approx. 2.3Kg (5 lb 1 oz)*2

*1 Without projecting parts.
*2 Excluding supplied accessories.

LMD-9050 9-inch Multiformat LCD Monitor

Features

Excellent Picture Quality *Excellent Brightness and Contrast *Wide Viewing Angle *170 degrees, horizontally and vertically *AR-Coated Protection Panel *Versatile Input Signals: Composite PAL/NTSC, Y/C, Component and RGB, D1-SDI and HD SDI *Professional Functionalities *Low power consumption: DC Approx. 24W, with AC Adaptor: Approx. 28W * Battery operation *Parallel Remote (Modular 8-pin) *Color Temperature Adjustment (*HIGH, *LOW) and the USER data 5,000K and 10,000K. *HIGH: Approx. 9,300K, *LOW: Approx. 6,500K *Versatile Scan Mode (1) Normal scan, the picture size is magnified 5% (2) Under scan, the picture size is reduced 3% and (3) Zoom *When 16:9 signal is input, the center part of the 16:9 image can be displayed as a 4:3 image *Five gamma presets *Control on Contrast, Bright, Chroma, Phase and Aperture *Blue Only Mode *Selectable Scan Size for the video input *The aspect ratio can be switched between 16:9 and 4:3 *Three-color tally lamp. * 19-inch EIA dual rack mountable (using the MB-525/528 mounting bracket)

Supplied Accessories

AC power cord x 1
AC plug holder x 1
AC adaptor x 1
Approx. 101 x 171 x 88mm (included a projection)
Approx. 700g
Operation Instructions x 1
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-525 Mounting Bracket for LMD-9050
MB-528 Mounting Attachment for LMD-9050
VF-509 Monitor ENG Kit for LMD-9050
Rechargeable Battery Pack
BP-GL65, BP-GL95, BP-IL75, BP-L40A
BP-M100/BP-M50
Battery Charger
BC-M150, BC-M50



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with AR-coated protection panel

Resolution

1024 x 768 dots

Pixel efficiency

99.99%

Picture Size (WxH)

Approx. 170.496 x 127.872mm 8.4 inch (213mm)

Aspect

4:3

Colors

16,770,000 colors

Viewing Angle

85°/85°/85°/85° (typical) (up/down/left/right contrast.10:1)

Input/Output

INPUT

LINE A

Composite BNC x 1

Y/C 4-pin mini-DIN x 1

Audio Minijack 1

LINE B

Composite BNC x 1

Audio Minijack 1

RGB/Component

BNC x 3

Audio Minijack 1

HD-SDI/D1-SDI

BNC x 2 (HD and D1 are automatically detected)

Ext.sync

BNC x 1

Remote Parallel remote Modular 8-pin x 1

OUTPUT

LINE A

Y/C 4-pin mini-DINx1

Composite BNC x 1 automatic

75Ω termination

LINE B

Composite BNC x 1 automatic

75Ω termination

HD-SDI/D1-SDI Monitor output

BNC x 1

Audio output

Minijack 1

Headphones output

Mini jack x 1(Monaural)

Speaker output

0.5W(Monaural)

General

Power consumption

Approx. 25W with AC Adaptor

Power requirement

DC 12V (XLR Connector x1), AC100 to

240V. 50/60Hz (AC power adaptor x1),

Battery

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85%(No condensation)

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Dimensions (WxHxD)

Approx. 216 x 206(230 including stand) x

136.1(159.5 including stand, 210 including

AC adaptor)mm

Mass

Approx.3 Kg without supplied Accessories

(3.11 Kg including stand, 3.9 Kg including

AC adaptor)

PVM-9L1 Color Video Monitor

Features

9-inch color video monitor. *Trinitron CRT provides a high resolution of 250 TV lines. *Beam current feedback circuit for stable color reproduction*Composite and Y/C inputs. *NTSC and PAL signals can be accepted. *Aspect ratio switchable between 4:3 and 16:9. *The color temperatures can be selected among high, low and users preset data that can be adjusted between 5000K and 10000K. *Parallel remote control capability. *Mountable into a 19-inch EIA standard rack with the optional mounting bracket.

* 9 inches viewable area, measured diagonally.

Supplied Accessories

AC Cord (1)

Operation Instructions (1)

Optional Accessories

MB-520 Mounting Bracket

MB-509 Mounting Panel



Specifications

General

Color system:

NTSC, PAL

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption (Typical)

40 W

Operating temperature:

0 to 35 °C (32 to 95 °F)

Storage temperature:

-10 to 40 °C (14 to 104 °F)

Operating humidity:

35 to 85% (No condensation)

Storage humidity:

0 to 90%

Dimensions:

Approx. 217 x 218 x 350 mm (8 5/8 x 8 5/8
x 13 7/8 inches)

Mass:

Approx. 6.3 kg (13 lb 14 oz)

CRT

CRT type*:

9-inch Trinitron

AG pitch:

0.5 mm

Phosphor:

P-22

Effective picture size (4:3)

159.5 (W) x 117.0 (H) mm, 194.5
(Diagonal) mm

Center Resolution (Y/C input 4:3)

250 TV lines

Frequency response

4.0 MHz (0 -6) dB

Scanning frequency

1 5.734 kHz (NTSC), 15.625 kHz (PAL)

Normal scan

6% overscan

Linearity

Horizontal

Less than 8% (typical)

Vertical

Less than 7% (typical)

Convergence

Center

0.4 mm (Typical)

Peripheral

0.5 mm (Typical)

Raster size stability

Horizontal

1.0% (typical)

Vertical

1.5% (typical)

HV regulation

3.0% (typical)

Color temperature

D65/D93/User adjustable

-Input/Output-

Line A

Composite

Loop-through BNC, 1.0 Vp-p +3 dB/
-6 dB, sync negative, automatic 75 Ω
termination

Y/C**

Loop-through Mini Din 4-pin, automatic
75 Ω termination

Y

1.0 Vp-p, sync negative

Audio

Phono jack, -5 dBu 47 k Ω or higher

Remote

Parallel remote

Modular 8-pin (Fixed)

Audio output

0.8 W (Distortion: Less than 5%)

Regulation Compliance

UL-1950, CSA-950, EN 60950, VCCI class

A, FCC class A, IC class A, C-Tick, CE

(LVD), CE (EMC), JEITA, DHHS, DNHWS,

CCC, KTL, BSMI

*Viewable area, measured diagonally. ** The Y/C
input has priority over the composite input.

PVM-9L2 Color Video Monitor

Features

9-inch color video monitor *Trinitron CRT provides a high resolution of 250 TV lines*Beam current feedback circuit for stable color reproduction*Composite, Y/C, RGB and component (Y/R-Y/B-Y) inputs *NTSC or PAL is detected automatically*Optional input adaptor board available*Accepts external sync*Aspect ratio switchable between 4:3 and 16:9*Auto setup for chroma and phase *Color temperature D65, D93 or user preset selectable *Underscan, blue only and tally functions *Parallel and serial remote control capability *Auto/manual degaussing *Mountable into a 19-inch EIA standard rack with the optional slide rail kit

* 8 inches viewable area, measured diagonally.



Supplied Accessories

AC Cord (1)
AC Plug Holder (1)
Operation Manual (1)

Optional Accessories

BKM-120D SD-SDI 4:2:2 Input Adaptor
BKM-129X Analog Component Input Adaptor
BKM-150CP SDTI-CP/SD-SDI Input Adaptor
BKM-126M PAL-M input adaptor
MB-520 Mounting Bracket
MB-509 Mounting Panel
VF-508 Monitor ENG Kit
BP-L60A Rechargeable Lithium-ion Battery Pack
BP-L90A Rechargeable Lithium-ion Battery Pack
BC-L120 Lithium-ion Battery Charger
BP-M50 Rechargeable Nickel Metal Hydride Battery Pack
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger

Specifications

General

Color system:
NTSC, PAL
Power consumption:
75 W, 86 W (with BKM-150CP)
Power requirements:
AC 100 to 240 V, 50/60 Hz
Power consumption (Typical/with options)
AC:47 W, DC:38 W AC:58 W, DC:48 W (with BKM-150CP)
Operating temperature:
0 to 35 °C (32 to 95 °F)
Storage temperature:
-10 to 40 °C (14 to 104 °F)
Operating humidity:
30 to 85% (No condensation)
Storage humidity:
0 to 90%
Dimensions:
217 (W) x 218 (H) x 373 (D) mm
(8 5/8 x 8 5/8 x 14 3/4 inches)
Mass:
8.0 kg (17 lb 10 oz)

CRT

CRT type:
9-inch Trinitron
AG pitch:
0.5 mm
Phosphor:
P-22
Effective picture size (4:3)
159.5 (W) x 117.0 (H) mm, 194.9 (Diagonal) mm
Resolution (4:3/16:9)
250 TV lines
Aperture correction:
0 to +6 dB
Frequency response:
6.0 MHz (-30) dB
Synchronization:
AFC time constant 1.0 ms
Normal scan:
7% overscan
Underscan:
5 % underscan
Linearity:
Horizontal: less than 4 %
Vertical: less than 4 %
Convergence:
Center: 0.4 mm (typical)
Peripheral: 0.5 mm (typical)
Raster size stability:
Horizontal: 1.0 %
Vertical: 1.5 %
HV regulation:
3.0 %
Color temperature:
D65/D93/User adjustable

Inputs/outputs

Line A
Composite
BNC, Loop-through, automatic 75 Ω termination
1.0 Vp-p +3 dB/-6 dB, sync negative
Y/C*
Mini Din 4-pin, Loop-through, automatic 75 Ω termination
Y: 1.0 Vp-p, sync negative
C: 0.286 Vp-p (NTSC) / 0.3 Vp-p (PAL)

Audio

Phono jack,
-5 dBu 47 k Ω or higher

Line B

Composite
BNC, Loop-through, automatic 75 Ω termination
1.0 Vp-p +3 dB/-6 dB, sync negative

Audio

Phono jack,
-5 dBu 47 k Ω or higher

External sync:

BNC, Loop-through, automatic 75 Ω termination
4.0 Vp-p \pm 6 dB, sync negative, usable tri-level sync signal 0.6 Vp-p \pm 6 dB

Option slot

1x

Audio

Phono jack x 2,
-5 dBu 47 k Ω or higher

Remote

Parallel remote
Modular 8-pin (Assignable)

Audio output

0.8 W (Distortion: Less than 5%)

Regulation Compliance

UL-1950, CSA-950, EN 60950, VCCI class A, FCC class A, IC class A, C-Tick, CE (LVD), CE (EMC), JEITA, DHHS, DNHW, CCC, KTL

Operating conditions

Operating temperature
0 to +35° C (+32 to +95° F)
Storage temperature
10 to +40° C (+14 to +104° F)
Operating humidity
30 to 85% (No condensation)
Storage humidity
0 to 90%

* The Y/C input has priority over the Composite input.

PVM-9L3 Color Video Monitor

The PVM-9L3 is an affordable 9-inch monitor using a Sony HR Trinitron CRT. With its compact design, excellent picture performance, full range of operational functions and high level of portability, the PVM-9L3 is designed to meet the demands of high-grade picture monitoring in a variety of program production applications.

Features

*High Resolution (450 TV lines/9-inch CRT), *Standard Y/C and Composite inputs. *Variety of Optional Inputs for SDI, SDTI-CP, DV, Analog Component and PAL-M signals
*Blue Only Mode, *High-Quality Y/C Separation,
*Assignable Parallel Remote Port, *High level of portability, *On-Screen Display, *Supports NTSC and PAL Color Systems, *19-inch EIA standard rack mountable



Supplied Accessories

AC Plug Holder (1)
Tally Number Plate (12)
Operation Manual (1)

Optional Accessories

BKM-120D SD-SDI 4:2:2 Input Adaptor
BKM-129X Analog Component Input Adaptor
BKM-150CP SDTI-CP/SD-SDI Input Adaptor
BKM-155DV DV Input Adaptor
BKM-126M PAL-M input adaptor
MB-520 Mounting Bracket
MB-509 Mounting Panel
VF-508 Monitor ENG Kit
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-M50 Rechargeable Nickel Metal Hydride Battery Pack
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger

Specifications

General

CRT
CRT type
9-inch HR Trinitron
AG pitch
0.25 mm
Phosphor
P-22
Effective picture size (4:3)
159.5 (W) x 117.0 (H) mm
194.9 mm (measured diagonally)
Resolution (4:3/16:9)
450 TV lines
Color system
PAL, NTSC
Aperture correction
0 to 6 dB
Frequency response
6.0 MHz \pm 0 dB/-3 dB
Synchronization
AFC time constant 1.0 ms
Scanning frequency
15.734 kHz (NTSC)
15.625 kHz (PAL)

Normal scan
7% overscan
Underscan
5% underscan
Linearity
Horizontal
Less than 4%
Vertical
Less than 4%
Convergence
Center
0.4 mm (typical)
Peripheral area
0.5 mm (typical)
Raster size stability
Horizontal
1.0%
Vertical
1.5%
HV regulation
3.0%
Color temperature
D65/D93/User adjustable
Power requirements
AC 100 to 240 V, 50/60 Hz
Power consumption
AC:47 W, DC:38 W
AC:58 W, DC:48 W (with BKM-150CP)
Dimensions (W x H x D)
Approx. 217 x 218 x 373 mm
(8 5/8 x 8 5/8 x 14 3/4 inches)
Mass
Approx. 8.0 kg (17 lb 10 oz)
Input/Output
Line A
Composite
BNC, Loop-through, automatic 75 Ω termination
1.0 Vp-p \pm 3 dB/-6 dB, sync negative
Y/C
Mini Din 4-pin, Loop-through, automatic 75 Ω termination
Y: 1.0 Vp-p, sync negative
C: 0.286 Vp-p (NTSC) / 0.3 Vp-p (PAL)
Audio
Phono jack
-5 dBu, 47 k Ω or higher

Line B
Composite
BNC, Loop-through, automatic 75 Ω termination
1.0 Vp-p \pm 3 dB/-6 dB, sync negative
Audio
Phono jack
-5 dBu, 47 k Ω or higher
Ext. sync Input/Output
BNC, Loop-through, automatic 75 Ω termination
4.0 Vp-p \pm 6 dB, sync negative, usable tri-level sync signal 0.6 Vp-p \pm 6 dB
Option slot
1x
Audio
Phono jack x 2
-5 dBu, 47 k Ω or higher
Remote
Parallel remote
Modular 8-pin (assignable)
Audio output
0.8 W (Distortion: Less than 5%)
Regulation Compliance
UL1950, CSA No.950, EN60950, EN55103-1, EN55103-2, VCCI, FCC class A, IC class A, C-Tick, CE, JEITA, DHHS, DNHW, CCC, KTL
Operating conditions
Operating temperature
0 to +35°C (+32 to +95°F)
Storage temperature
-10 to +40°C (+14 to +104°F)
Operating humidity
30 to 85% (No condensation)
Storage humidity
0 to 90%

SONY

Monitor Accessories

BKM-10R	328
BKM-11R	328
BKM-120D	329
BKM-127W	329
BKM-129X	330
BKM-12Y	330
BKM-142HD	331
BKM-14L	332
BKM-150CP	332
BKM-20D	333
BKM-21D	333
BKM-220D	334
BKM-22X	334
BKM-243HS	335
BKM-24N	335
BKM-255DV	336
BKM-25P	336
BKM-26M	337
BKM-27T	337
BKM-28X	338
BKM-30E14	338
BKM-30E20	338
BKM-31E14	339
BKM-320D	339
BKM-32H	339
BKM-33H14	340
BKM-33H20	340
BKM-34H	340
BKM-41HD	341
BKM-42HD	341
BKM-48X	342
MB-502C	342
MB-509	343
MB-510	343
MB-512	344
MB-520	344
MB-522A	345
MB-523	345
MB-524	346
MB-525	346
MB-526	347
MB-527	347
MB-528	348
SU-558	348
SU-559	348
VF-508	349
VF-509	349

BKM-10R Monitor Control Unit

Features

*Central control unit *Up to 32 displays can be controlled



Applicable Models

BVM-14F1E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D14H1E Color Video Monitor
BVM-D14H5E Color Video Monitor

BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor
BVM-D9H1E Color Video Monitor
BVM-F24 CineAlta Color Video Monitor

BKM-11R Monitor Control Unit

Features

*Hand-held control unit *Up to 32 displays can be controlled



Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D14H1E Color Video Monitor
BVM-D14H5E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor
BVM-D9H1E Color Video Monitor
BVM-D9H5E Color Video Monitor
BVM-F24 CineAlta Color Video Monitor

BKM-120D SD-SDI 4:2:2 Input Adaptor

Features

*SD-SDI input/output

Applicable Models

BVM-D14H1E Color Video Monitor
BVM-D14H5E Color Video Monitor
BVM-D9H1E Color Video Monitor
BVM-D9H5E Color Video Monitor
PVM-14L2 Color Video Monitor
PVM-14L3 Color Video Monitor
PVM-14L4 Color Video Monitor
PVM-20L2 Color Video Monitor
PVM-20L4 Color Video Monitor
PVM-9L2 Color Video Monitor
PVM-9L3 Color Video Monitor

Specifications

Inputs/outputs

SD-SDI:

BNC (x2)

Active Loop-through

Dimensions

24.7 (W) x 161.4 (H) x 121.8 (D) mm

(1 x 6 3/8 x 4 7/8 inches)

Mass

310 g (11 oz)



BKM-127W NTSC/PAL Input Adaptor

Features

*Composite video input/output and Y/C input/output

*Digital 3-lines Comb filter

Applicable Models

BVM-D14H1E Color Video Monitor
BVM-D14H5E Color Video Monitor
BVM-D9H1E Color Video Monitor
BVM-D9H5E Color Video Monitor

Specifications

Inputs/outputs

Composite:

Loop-through BNC (x 2)

Y/C:

Loop-through Mini DIN 4-pin

Dimensions

24.7 (W) x 161.4 (H) x 121.8 (D) mm

(1 x 6 3/8 x 4 7/8 inches)

Mass

Approx. 270 g (10 oz)



BKM-129X Analog Component Input Adaptor

Features

*Component input/output and external sync input/output

Applicable Models

BVM-D14H1E Color Video Monitor
BVM-D14H5E Color Video Monitor
BVM-D9H1E Color Video Monitor
BVM-D9H5E Color Video Monitor
PVM-14L2 Color Video Monitor
PVM-14L3 Color Video Monitor
PVM-14L4 Color Video Monitor
PVM-20L2 Color Video Monitor
PVM-20L4 Color Video Monitor
PVM-9L2 Color Video Monitor
PVM-9L3 Color Video Monitor

Specifications

Inputs/outputs

RGB/Component:

Loop-through BNC

External sync:

Loop-through BNC

Dimensions

24.7 (W) x 161.4 (H) x 121.8 (D) mm
(1 x 6 3/8 x 4 7/8 inches)

Mass

Approx. 250 g (9 oz)



BKM-12Y Memory Card

Features

*PCMCIA card *Monitor setups can be saved/downloaded

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor
BVM-F24 CineAlta Color Video Monitor



BKM-142HD HD SDI Input Adaptor

Features

*HD SDI signal input and monitor out *Acceptable HD SDI signals: 1080/24PsF, 1080/50I, 1035/60I, 1080/60I, 720/60P

Applicable Models

BVM-D14H1E Color Video Monitor

BVM-D14H5E Color Video Monitor

BVM-D9H1E Color Video Monitor

BVM-D9H5E Color Video Monitor

Specifications

Inputs/outputs

HD SDI:

HD SDI terminal (x 2)

MONITOR OUT:

x 1

Dimensions*

49.7 (W) x 161.4 (H) x 121.8 (D) mm

(2 x 6 3/8 x 4 7/8 inches)

Mass

Approx. 730 g (1lb 10 oz)



* The BKM-142HD occupies 2 slots.

BKM-14L Auto Setup Probe

Features

- *External probe for color temperature auto alignment
- *Auto white balance *Color temperature analysis



Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D14H1E Color Video Monitor
BVM-D14H5E Color Video Monitor

BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor
BVM-D9H1E Color Video Monitor
BVM-D9H5E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-F24 CineAlta Color Video Monitor
PVM-14L3 Color Video Monitor
PVM-14L4 Color Video Monitor
PVM-20L4 Color Video Monitor

Specifications

Mass
135 g (4 oz)

BKM-150CP SDTI-CP/SD-SDI Input Adaptor

Features

- *SDTI-CP/SD-SDI input/output and audio output

Applicable Models

PVM-14L2 Color Video Monitor
PVM-14L3 Color Video Monitor
PVM-14L4 Color Video Monitor
PVM-20L2 Color Video Monitor
PVM-20L4 Color Video Monitor
PVM-9L2 Color Video Monitor
PVM-9L3 Color Video Monitor

Specifications

Inputs/outputs

SDTI-CP/SD-SDI:
BNC (x2)
Active Loop-through
Audio output:
Pin jack (x 2)

Dimensions

50 (W) x 162 (H) x 122 (D) mm
(2 x 6 1/2 x 4 7/8 inches)

Mass

580 kg (1 lb 4 oz)



BKM-20D SDI 4:2:2 Decoder Adaptor

Features

*SDI (4:2:2 only) input/output and component input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-D20G1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

SDI:

Active loop-through BNC (x 3)

Component:

Loop-through BNC

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

768 g (1 lb 11 oz)



BKM-21D SDI Multi Decoder Adaptor

Features

*SDI (4:2:2 or 4fsc NTSC/PAL) input/output and composite (NTSC/PAL) input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

SDI:

Active loop-through BNC (x 3)

Composite:

Loop-through BNC (x 3)

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

770 g (1 lb 11oz)



BKM-220D SDI 4:2:2 Input Adaptor

SDI 4:2:2 Input Adaptor main unit providing video input and output connectors for the main unit and a decoder for serial digital component signals.



Features

*Decoder for serial digital component signals *Serial digital input and output signal connector

Applicable Models

MEU-WX1 Multiformat Engine Unit

Supplied Accessories

Operating Instructions (1)

Specifications

General

Mass

Approx. 250 g (9 oz)

Voltage

+5 V (supplied from the main unit)

Power consumption

Approx. 1.5 W

Operating conditions

Temperature

0°C to 35°C (32°F to 95°F)

Optimum temperature

20°C to 30°C (68°F to 86°F)

Humidity

0% to 90% (no condensation)

Pressure

700hPa to 1060 hPa

Storage and transport conditions

Temperature

-10°C to 40°C (14°F to 104°F)

Humidity

0% to 90%

Pressure

700 hPa to 1060 hPa

Maximum external dimensions (w/h/d)

100 × 20 × 162 mm (4 × 13/16 × 6 1/2 inches)

Input/output connectors

Digital input

BNC × 2, with monitor output connector

Signal characteristics

Digital component signals

Sampling frequency

Y/R-Y/B-Y: 13.5 MHz

Quantization

10bits/sample

MONITOR OUT

Output signal amplitude:

800 mVp-p ± 10%

Output impedance:

75-ohms unbalanced

Transmission distance

200 m (approx. 656 ft) max. (When using 5C-2V coaxial cables (Fujikura, Inc.) or equivalent.)

BKM-22X SDI Multi Input Expansion Adaptor

Features

*SDI input/output and component input/output

Applicable Models

BVM-14F1E Color Video Monitor

BVM-14F5E Color Video Monitor

BVM-20F1E Color Video Monitor

BVM-D20F1E Color Video Monitor

BVM-D24E1WE Color Video Monitor

BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

SDI:

Active loop-through BNC (x 3)

Component:

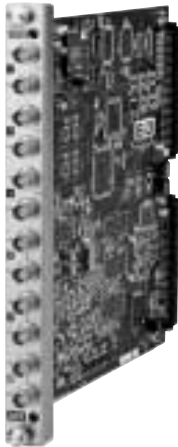
Loop-through BNC

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

615 g (1 lb 5oz)



BKM-243HS HD SDI&SDI Input Adaptor

HD SDI & SDI Input Adaptor providing video input and output connectors for the main unit and a decoder for HD/D1 serial digital component signals.

Features

*Decoder for serial digital component signals *Serial digital input and output signal connector



Applicable Models

MEU-WX1 Multiformat Engine Unit

Supplied Accessories

Operating Instructions (1)

Specifications

General

Voltage

+3.3 V, +5 V (supplied from the main unit)

Power consumption

Approx. 2 W

Operating conditions

Temperature

0°C to 35°C (32°F to 95°F)

Optimum temperature

20°C to 30°C (68°F to 86°F)

Humidity

0% to 90% (no condensation)

Pressure

700hPa to 1060 hPa

Storage and transport conditions

Temperature

-10°C to 40°C (14°F to 104°F)

Humidity

0% to 90%

Pressure

700 hPa to 1060 hPa

Maximum external dimensions (w/h/d)

100 × 20 × 162 mm (4 × 13/16 × 6 1/2 inches)

Mass

Approx. 250 g (9 oz)

Input/output connectors

Digital input

BNC × 2, with monitor output connector

Signal characteristics

Digital component signals

Sampling frequency

D1-SDI: Y/R-Y/B-Y: 13.5 MHz

HD-SDI: Y/PB/PR: 74.25 MHz

Quantization

10bits/sample

MONITOR OUT

Output signal amplitude:

800 mVp-p ± 10%

Output impedance:

75-ohms unbalanced

Transmission distance

D1-SDI: 200 m (approx. 656 ft) max.

(When using 5C-2V coaxial cables (Fujikura, Inc.) or equivalent.)

HD-SDI: 100 m (approx. 328 ft) max.

(When using 5C-FB coaxial cables (Fujikura, Inc.) or equivalent.)

BKM-24N NTSC Decoder Adaptor

Features

*Composite (NTSC) input/output

Applicable Models

BVM-14F1E Color Video Monitor

BVM-14F5E Color Video Monitor

BVM-14G1E Color Video Monitor

BVM-14G5E Color Video Monitor

BVM-20F1E Color Video Monitor

BVM-20G1E Color Video Monitor

BVM-D20F1E Color Video Monitor

BVM-D24E1WE Color Video Monitor

BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

Composite:

Loop-through BNC (x 6)

Dimensions

25 (W) x 256 (H) x 245 (D) mm

(31/32 x 10 1/8 x 9 3/4 inches)

Mass

660 g (1 lb 7oz)



BKM-255DV DV Input Adaptor

Features

DV Input Adaptor

- *Decodes DV signals into Audio/Video signals
- *Two pairs of 6-pin DV connectors
- *400 Mbps communication
- *Power supply is not supported.

Supplied Accessories

Operating Instructions (1)

Applicable Models

LMD-2140MD LCD Monitor
MEU-WX1 Multiformat Engine Unit

Specifications

General

Power requirements
+5 V (supplied from the main unit)
Power consumption
4W

Operating conditions

Temperature
0°C to 35°C (32°F to 95°F)
Optimum temperature
20°C to 30°C (68°F to 86°F)
Humidity
0% to 90% (no condensation)

Pressure
700 hPa to 1060 hPa

Storage and transport conditions

Temperature
-10°C to 40°C (14°F to 104°F)
Humidity
0% to 90%

Pressure
700 hPa to 1060 hPa
Maximum external dimensions (w/h/d)
100 x 20 x 161 mm (4 x 13/16 x 6 3/8 inches)
Mass
Approx. 230 g (0.5 lb)

Input/Output connectors

DV
6-pin (IEEE1394) x 2

Signal characteristics

Video Signals
Sampling frequency
Y/R-Y/B-y
13.5 MHz

Quantization
8 bits/sample

Audio Signals
Channel number
4 ch
Sampling frequency
2ch: 48 kHz
4ch: 32 kHz

Quantization
2ch: 16 bits
4ch: 12 bits



BKM-25P PAL Decoder Adaptor

Features

- *Composite (PAL) input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

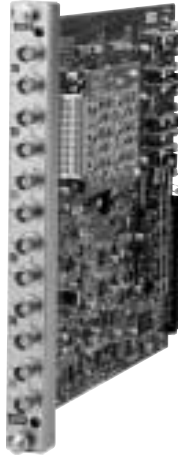
Composite:
Loop-through BNC (x 6)

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

680 g (1 lb 7oz)



BKM-26M PAL-M Decoder Adaptor

Features

*Composite (PAL-M) input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

Composite:

Loop-through BNC (x 6)

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

680 g (1 lb 7oz)



BKM-27T Tri-standard Decoder Adaptor

Features

*Composite (NTSC/PAL/SECAM) input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

Composite:

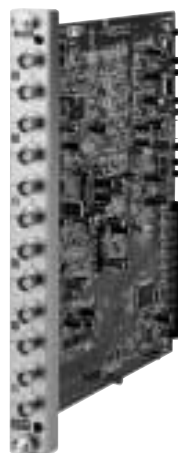
Loop-through BNC (x 6)

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

580 g (1 lb 4 oz)



BKM-28X Analog Input Expansion Adaptor

Features

*Composite input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F1U Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14F5U Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G1U Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-14G5U Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20F1U Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-20G1U Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D24E1WU Color Video Monitor
BVM-D32E1WE Color Video Monitor
BVM-D32E1WU Color Video Monitor

Specifications

Inputs/outputs

Composite:

Loop-through BNC (x 6)

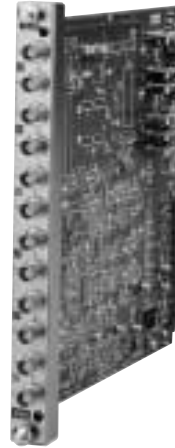
Dimensions

25 (W) x 256 (H) x 245 (D) mm

(31/32 x 10 1/8 x 9 3/4 inches)

Mass

550 g (1 lb 3oz)



BKM-30E14 Rack Mount Kit

Features

*19-inch EIA standard rack mount kit for 14-inch stand-alone monitors

Applicable Models

BVM-14F5E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-D14H5E Color Video Monitor



BKM-30E20 Rack Mount Kit

Features

*19-inch EIA standard rack mount kit for 20-inch monitors

Applicable Models

BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor



BKM-31E14 Rack Mount Kit

Features

*19-inch EIA standard rack mount kit for 14-inch monitors

Applicable Models

BVM-14F1E Color Video Monitor
BVM-D14H1A Color Video Monitor
BVM-D14H1E Color Video Monitor



BKM-320D SDI 4:2:2 Input adaptor

SDI 4:2:2 Input adaptor

Applicable Models

LMD-4420 Multiple LCD Monitors
LMD-5320 Multiple LCD Monitors
LMD-7220W Multiple LCD Monitors
LMD-2020 LCD Monitors
LMD-1420 LCD Monitors

Specifications

Signal characteristics

Input signal format:

SMPTE259M 270Mbps, 10bit, 4:2:2
component digital video

Input/output connectors

Input: BNC x 1

Output: D-sub9 pin

General

Power requirements: +5V(supplied from
the monitor)

Power consumption: Approx.1.7W

Dimensions(W x H X D):

Approx.68 x 20 x 56 mm(2 3/4 x 1 3/16
x 2 1/4 inches)

Mass: Approx.75g(3oz)



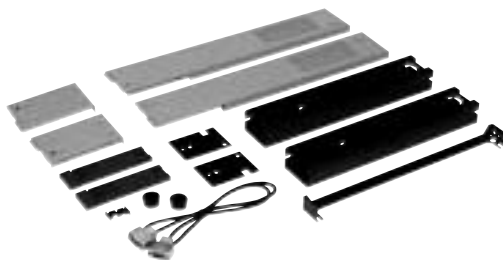
BKM-32H Control Unit Attachment Kit

Features

*Attachment kit to attach BKM-10R to 20-inch monitors

Applicable Models

BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor



BKM-33H14 16:9 Mask

Features

*16:9 mask for 14-inch monitors

Applicable Models

BVM-14F1E Color Video Monitor

BVM-14F5E Color Video Monitor

BVM-14G1E Color Video Monitor

BVM-14G5E Color Video Monitor



BKM-33H20 16:9 Mask

Features

*16:9 mask for 20-inch monitors

Applicable Models

BVM-20F1E Color Video Monitor

BVM-20G1E Color Video Monitor



BKM-34H Control Unit Attachment Kit

Features

*Attachment kit to attach BKM-10R to 24-inch monitors

Applicable Models

BVM-D24E1WE Color Video Monitor

BVM-F24 CineAlta Color Video Monitor



BKM-41HD HD SDI Input Adaptor

Features

*HD SDI input with monitor output and component input/output

Applicable Models

BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

HD SDI:

BNC
Monitor output

Component:

Loop-through BNC

Dimensions*

50 (W) x 256 (H) x 245 (D) mm
(2 x 10 1/8 x 9 3/4 inches)

Mass

Approx. 1280 g (2 lb 13 oz)



* The BKM-41HD occupies 2 slots.

BKM-42HD HD SDI Input Adaptor

Features

*HD SDI input with monitor output and component input/output

Applicable Models

BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

HD SDI:

BNC (x 2)
Monitor output (x 2)

Component:

Loop-through BNC

Dimensions*

50 (W) x 256 (H) x 245 (D) mm
(2 x 10 1/8 x 9 3/4 inches)

Mass

Approx. 1400 g (3 lb 1 oz)



* The BKM-42HD occupies 2 slots.

BKM-48X HD Analog Input Expansion Adaptor

Features

*HD, composite, Y/C or component input/output

Applicable Models

BVM-14F1E Color Video Monitor
BVM-14F5E Color Video Monitor
BVM-14G1E Color Video Monitor
BVM-14G5E Color Video Monitor
BVM-20F1E Color Video Monitor
BVM-20G1E Color Video Monitor
BVM-D20F1E Color Video Monitor
BVM-D24E1WE Color Video Monitor
BVM-D32E1WE Color Video Monitor

Specifications

Inputs/outputs

Video:

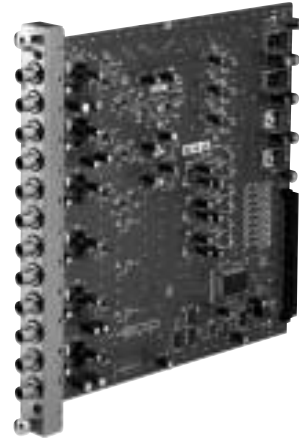
Loop-through BNC (x 6)

Dimensions

25 (W) x 256 (H) x 245 (D) mm
(31/32 x 10 1/8 x 9 3/4 inches)

Mass

660 g (1 lb 7oz)



MB-502C Mounting Bracket

Features

*19-inch EIA standard rack mounting bracket for
14-inch monitors

Applicable Models

PVM-14L1 Color Video Monitor
PVM-14L2 Color Video Monitor
PVM-145E B&W Monitor
PVM-146E B&W Monitor

Specifications

Dimensions

483 (W) x 355 (H) x 302 (D) mm
(19 1/8 x 14 x 12 inches)

Mass

3.8 kg (8 lb 6 oz)



MB-509 Mounting Attachment

Features

*Mounting panel for 19-inch EIA standard rack for 9-inch monitors

Applicable Models

BVM-D9H5E Color Video Monitor
PVM-95 Black and White Video Monitor
PVM-95E Black and White Video Monitor
PVM-96 Black and White Video Monitor
PVM-96E Black and White Video Monitor
PVM-9L1 Color Video Monitor
PVM-9L2 Color Video Monitor
PVM-9L3 Color Video Monitor

Specifications

Dimensions

217 (W) x 212.5 (H) x 63 (D) mm
(8 5/8 x 8 3/8 x 2 1/2 inches)

Mass

400 g (14 oz)



MB-510 Mounting Attachment

Features

*Mounting attachment for attaching BKM-10R control unit to monitors

Applicable Models

BKM-10R
TU-1040E



MB-512 Mounting Bracket

Applicable Models

TU-1040E TV Tuner Unit

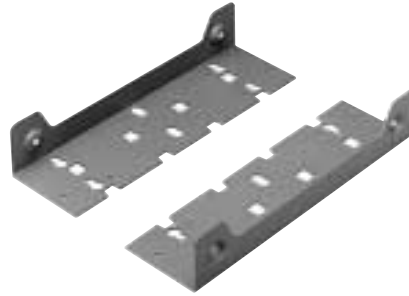
Specifications

Dimensions

63 (W) x 40 (H) x 210 (D) mm
(2 1/2 x 1 5/8 x 8 3/8 inches)

Mass

260 g (9 oz)



MB-520 Mounting Bracket

Features

*19-inch EIA standard rack mounting bracket for 6-inch and 9-inch monitors

Applicable Models

BVM-D9H1E Color Video Monitor

BVM-D9H5E Color Video Monitor

PVM-95E Black and White Video Monitor

PVM-96E Black and White Video Monitor

PVM-9L1 Color Video Monitor

PVM-9L2 Color Video Monitor

PVM-9L3 Color Video Monitor

Specifications

Dimensions

479 (W) x 222 (H) x 422.3 (D) mm
(18 7/8 x 8 3/4 x 16 3/4 inches)

Mass

2.7 kg (5 lb 15 oz)



MB-522A Mounting Bracket

Features

7U size Rack-Mount Bracket for LMD-171W

Applicable Model

LMD-171W

Specifications

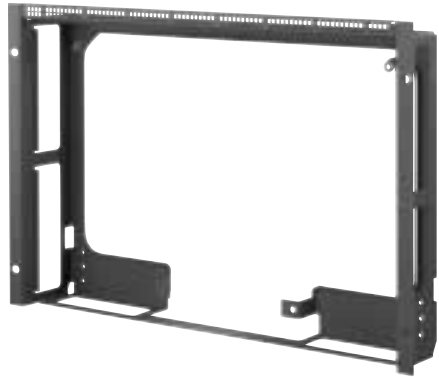
Dimensions

310 (W) x 483 (HD) x 74 (D) mm

12 1/4 (W) x 19 1/8 (H) x 3 (D) inches

Mass

Approx. 1.4kg (3 lb 1oz)



MB-523 Mounting Bracket

Features

10U size Rack-Mount Bracket for LMD-210

Applicable Model

LMD-210

Specifications

Dimensions

483 (W) x 444.3 (H) x 87 (D) mm

19 1/8 (W) x 17 1/2 (H) x 3 1/2 (D) inches

Mass

3 Kg

6 lb 10 oz



MB-524 Mounting Bracket

7U size Rack-Mount Bracket for LMD-150

Applicable Models

LMD-150

LCD Monitor

Specifications

Dimensions

Approx. 482 (W) x 308 (H) x 70 (D) mm

Approx. 19 (W) x 12 1/8 (H) x 2 3/4 (D) inches

Mass

Approx. 1.4 kg (3 lb 1 oz)



MB-525 Mounting Bracket

Features

6U size Rack-Mount Bracket

Applicable Models

LMD-9050

Specifications

Dimension (W x H x D):

Approx. 484.4 x 222.5 x 158 mm

Mass:

Approx. 1.8kg



MB-526 Mounting Bracket

Features

8U size Rack-Mount Bracket

Applicable Models

LMD-1410

LMD-1420

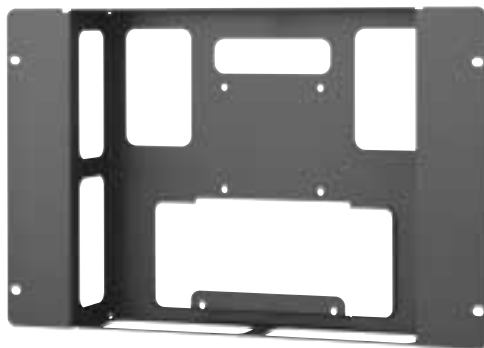
Specifications

Dimensions (W x H x D):

Approx. 483 x 310 x 89 mm

Mass:

Approx. 2kg



MB-527 Mounting Bracket

Features

10U size Rack-Mount Bracket

Applicable Models

LMD-2010

LMD-2020

Specifications

Dimensions (W x H x D):

Approx. 483 x 443 x 73 mm

Mass:

Approx. 4kg



MB-528 Blank Panel

Applicable Models
LMD-9050

Specifications
Dimensions (W x H x D):
Approx. 216 x 208 x 49 mm
Mass:
Approx. 0.6kg



SU-558 Monitor Stand

Monitor Stand for LMD-Series

Applicable Models
LMD-150 LCD Monitor
LMD-171W LCD Monitor
LMD-210 LCD Monitor
LMD-230W LCD Monitor

Specifications
Mass
4.9 kg (10 lb 13 oz)
Size
240.2 (W) x 250.3 (D) x 191.6 (H) mm
(9 1/2 x 9 7/8 x 7 5/8 inches)
Stand movable range
Tilting angle of a monitor
74°
Tilting angle of the stand arm
64°



SU-559 Floor Stand

Features Monitor Stand for LMD-320W

Supplied Accessories

Front Top Cover (1)
Rear Top Cover (1)
Holders (2)
Screws A (2)
Screws B (4)
Screws C (2)

Applicable Models
LMD-320W LCD Monitor

Specifications
Mass
32 kg (70 lb 9 oz)
Size
602 (W) x 500 (D) x 676 (H) mm
23 11/16 (W) x 19 11/16 (D) x 26 5/8 (H) inches
Tilt angle
45°



VF-508 Monitor ENG Kit

Features

*Viewing hood and connector protector for use in the field

Applicable Models

BVM-D9H1E Color Video Monitor

BVM-D9H5E Color Video Monitor

PVM-9L2 Color Video Monitor

PVM-9L3 Color Video Monitor



VF-509 Monitor ENG Kit

Features

Monitor ENG Kit *Carrying Handle, Viewing Hood and Cable Protector are included.

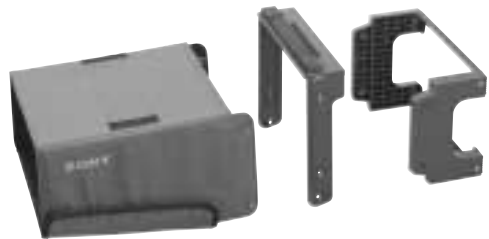
Applicable Models

LMD-9050

Specifications

Mass:

Approx.: 1.3kg



SONY

Audio Mixer & Consoles

DMX-P01	352
SRP-X700P	353
SRP-X500P	354

DMX-P01 Portable digital mixer

Features

*Portable, digital field-mixer designed for ENG/EFP application *Compact (266 x 68 x 206 mm) and lightweight (Approx. 2.2 kg) *24-bit A/D and D/A converters and internal 32-bit DSP for excellent sound quality *4 microphone/line inputs with +48 V mic power (on/off) *2 channels of balanced analog output and AES/EBU digital output (stereo) via XLR-type connectors *Digital cascade input with phono connector *Coaxial output connector for mix-bus output or S/PDIF digital output *Selectable sampling rate: 48 kHz or 96 kHz *Full control of every parameter from the front panel using physical and menu-driven controls *Digital limiters on both inputs and outputs, and digital compressors on outputs *A scene memory recall feature to instantly recall up to ten different user-defined parameter settings or factory default settings *A power-on memory function recalls parameters in three different ways: default factory settings, the last used settings or parameters of one specific scene memory *Easy-to-read backlit LCD panel displays output levels and setup menus, and allows various parameter settings *Meter calibrations can be selected from six types: VU, BBC type, DIN type, NORDIC type, IEC type1, and dBFS *Camera-audio return-level check via 12-pin connector *Panel lock and parameter lock function *Adjustable HPF with two user settings *Operates on eight AA-size alkaline (LR6) batteries or external DC 10 to 15 V power *Spare battery-compartment for quick battery change

Applicable Models

PDW-510 XDCAM Camcorder (DVCAM Recording)
 PDW-510P XDCAM Camcorder (DVCAM Recording)
 PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
 PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Supplied Accessories

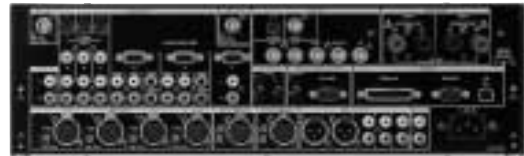
Spare battery compartment (1)
 Meter scale sheets (6)
 Ferrite clamp filters (2)
 12-pin male connector (1)
 Rubber foot (4)



SRP-X700P Digital Powered Mixer (220/230V)

Features

*Ideal for conference rooms, lecture theaters and other presentation applications *Contains the functions of a high-quality digital audio mixer, power amplifier, wireless mic receiver, RGB/video switcher, feedback reducer and equalizer in a compact 3U high unit *Accepts 3 RGB/component, 3 composite and 3 S-video inputs, and selects 1 RGB/component, 1 composite, and 1 S-video for outputs *High-quality component signals (480p/1080i) and RGB signals with 150 MHz frequency response (1280x1024 pixels, SXGA) *Mixes wireless mic and wired mic inputs with audio from video/DVD players for 10 outputs *24-bit AD/DA conversion at 48kHz sampling frequency *6 mic inputs with phantom powering, 2 wireless mic (or line) inputs, and 2 line inputs *Wireless mic slots for storing 2 WRU-806A/806B tuner modules *200W+200W(4_)/150W+150W(8_)/max.150W (70V Line) digital power amp *Feedback reducer, parametric EQ, LCF (100Hz), compressor/limiter, delay, automatic mixing and flexible signal routing all performed in a digital domain *20 scene memories with quick memory recall capacity *Remote control of SRP-X700P via USB, RS-232C or parallel ports from a PC, a system controller or a control panel *RS-232C output port for remote control of a projector/plasma display unit *Control-S ports for remote control of VCRs, DVD/CD/MD players and video/data projectors *Parallel output port for remote control of environment devices *Supplied software for comprehensive set-up and controls of SRP-X700P



Supplied Accessories

AC power cord (1)
IR Transmitter (1)
Foot (4)
Control software disc* (1)
Operation manual (1)

Optional Peripherals

WRU-806A UHF Synthesized Tuner Unit (64U)
WRU-806A UHF Synthesized Tuner Unit (66U)
WRU-806A UHF Synthesized Tuner Unit (68U)
WRU-806B UHF Synthesized Tuner Unit (6264U)
WRU-806B UHF Synthesized Tuner Unit (6668U)
AN-820A UHF Antenna

*System requirements PC: Windows 98SE, Windows 2000, Windows ME, or Windows XP

SRP-X500P Digital Powered Mixer/Switcher (220V)

Features

*Same as the flagship model SRP-X700P, the SRP-X500P integrates the functionality of the following seven devices to prepare for the scenes of today's modern presentations requiring a wide range of A/V sources, in its compact 3U height, 19-inch rack-mountable chassis *Ideal for conference rooms, lecture theatres and other presentation applications *Contains the functions of a high-quality digital audio mixer *RGB Switcher *Video Switcher *Wireless Tuner Base Unit *Audio Mixer *Power Amplifier *Feedback Reducer *Equalizer *All-In-One Design *High Quality Digital Processor *Versatile Interface *Integrated Wireless Tuner Unit Slots *Comprehensive Remote Control *Built-in Four-Channel Digital Power Amplifier



Supplied Accessories

Power cord (1)
Feet (4)
CD-ROM (1)
Operating Instructions (1)
Antenna (2)

Optional Peripherals

AN-820A UHF Antenna
UWP-X1/X2 Wireless Microphone Package
WRU-806A UHF Synthesizer Tuner Unit
RM-AV3000 series Universal Remote
Commander

Wired Microphones

DC-78	356
ECM-166BC	356
ECM-166BMP	357
ECM-44B	358
ECM-44BC	359
ECM-44BMP	360
ECM-530	361
ECM-55B	362
ECM-66B	363
ECM-670	364
ECM-672	365
ECM-678	366
ECM-77B	367
ECM-77BC	368
ECM-77BMP	369
ECM-77BPT	370
ECM-88B	371
ECM-88BC	372
ECM-88BPT	373
ECM-88FPT	373
F-710	374
F-720	374
F-780	375
AD-KIT88B	376
SAD-H88B	376
SAD-V88B	376
SAD-W88BL	376
SAD-S88B	377
AD-KIT88	377
SAD-88B	377
SAD-P88	377
SAD-W88B	378
AD-R88B	378
AD-C88	378
AD-KIT77	378
SAD-H77B	379
SAD-V77B	379
SAD-W77B	379
SAD-S77	379
AD-R77B	380
AD-C77B	380
AD-C77	380
AD-R66B	380
SAD-H55B	381
AD-R55B	381
SAD-H44B	381
AD-R44B	381

DC-78 Power Supply Unit

Features

- *Designed for use with Sony lavalier microphones equipped with a Sony 4-pin (SMC9-4P) connector
- *Two-way powering: battery operation (using an AA-size (LR6) alkaline battery) or external DC operation (12 to 48 V)
- *Supplied with an SMC9-4S input connector and an XLR 3-pin output connector

Applicable Models

ECM-88 Lavalier Microphone

Specifications

Power requirements:

- Internal battery: DC 1.5 V (AA-size (LR6) alkaline battery)
- External battery: DC 12 to 48 V

Battery life:

- Approx. 6000 h

Input connector:

- Sony 4-pin (SMC9-4S)

Output connector:

- XLR-3-12C type

Dimensions:

- 20.0 dia. x 144.0 (h) mm (13/16 x 5 3/4 inches)

Mass:

- Approx. 130 g (4.59 oz) including batteries



ECM-166BC Lavalier Microphone

Features

- *Uni-directional, electret condenser microphone
- *Resistant to howling by rejecting indirect sound
- *Ideal for institutional uses and sound contracting applications such as speeches, lectures and conferences
- *Microphone head: 12.5 mm dia x 23.5 mm (1/2 inch dia. x 15/16 inch), 3.5 g (0.12 oz, microphone only)
- *SMC9-4P type connector for use with WRT-822A/822B/860A



Supplied Accessories

- Urethane wind screen (1)
- Holder clip (1)

Specifications

Capsule type:

- Electret Condenser

Directivity:

- Uni-directional

Frequency response:

- 100 Hz to 10 kHz

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

- 45 dB (5.6 mV)

Output impedance (at 1 kHz):

- 2.5 k Ω \pm 30% (unbalanced)

Dynamic range:

- 96 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz, 1

Pa.):

- 60 dB or more

Inherent noise:

- 34 dB SPL or less

Max. input sound pressure level:

- 130 dB SPL

Normal operating voltage:

- DC 3 V (supply range: DC 3 to 10 V)

Current drain:

- 0.4 mA or less

Output connector:

- SMC9-4P type

Cable length:

- 1.2 m (3.9 feet)

Dimensions (microphone head):

- 12.5 mm dia. x 23.5 mm (1/2 inch dia. x 15/16 inch)

Mass (microphone head):

- 3.5 g (0.12 oz)

*0 dB SPL = 2E-5 Pa.

ECM-166BMP Lavalier Microphone

Features

- *Uni-directional, electret condenser microphone
- *Resistant to howling by rejecting indirect sound
- *Ideal for institutional uses and sound contracting applications such as speeches, lectures and conferences
- *Microphone head: 12.5 mm dia x 23.5 mm (1/2 inch dia. x 15/16 inch), 3.5 g (0.12 oz, microphone only)
- *3-pole mini plug with a stable lock mechanism for use with WRT-805A/805B

Supplied Accessories

- Urethane wind screen (1)
- Holder clip (1)
- Operation manual (1)

Specifications

Capsule type:

Electret condenser

Directivity:

Uni-directional

Frequency response:

100 Hz to 10 kHz

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-45 dB (5.6 mV)

Output impedance (at 1 kHz):

2.5 k Ω \pm 30% (unbalanced)

Dynamic range:

96 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.):

60 dB or more

Inherent noise:

34 dB SPL or less

Max. input sound pressure level:

130 dB SPL

Normal operating voltage:

DC 3 V (supply range: DC 3 to 10 V)

Current drain:

0.4 mA or less

Output connector:

3.5 mm dia., 3-pole mini plug

Cable length:

1.2 m (3.9 feet)

Dimensions (microphone head):

12.5 mm dia. x 23.5 mm
(1/2 inch dia. x 15/16 inch)

Mass (microphone head):

3.5 g (0.12 oz)

*0 dB SPL = 2E-5 Pa.



ECM-44B Lavalier Microphone

Features

*Omni-directional, electret condenser microphone
 *Superior sound quality *Complete with in-line battery unit
 *Microphone head: 8.5 mm dia. x 14.5 mm (11/32 inch dia. x 19/32 inch), 2g (0.07 oz)
 *Microphone cable length: 3.0 m (9.8 feet)

Supplied Accessories

Holder clip (single/horizontal type) (1)
 Urethane wind screen (1)
 Microphone case (1)

Optional Accessories

SAD-H44B Lavalier-Microphone Holder Clip
 AD-R44B Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Frequency response:

40 Hz to 15 kHz

Directivity:

Omni-directional

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-53.0 dB \pm 3 dB

Output impedance (at 1 kHz):

250 Ω \pm 20% (balanced)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

62 dB or more

Inherent noise:

32 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7 T):

5 dB SPL or less

Max. input sound pressure level:

122 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

R6 (1.5V) (R6P battery life: approx. 5,000 h)

Normal operating voltage:

DC 1.5 V

Current drain:

0.3 mA or less

Dimensions:

Microphone head:

8.5 mm dia. x 14.5 mm
 (11/32 inch dia. x 19/32 inch)

Power unit:

20.0 mm dia. x 126 mm
 (13/16 inch dia. x 5 inches)

Mass:

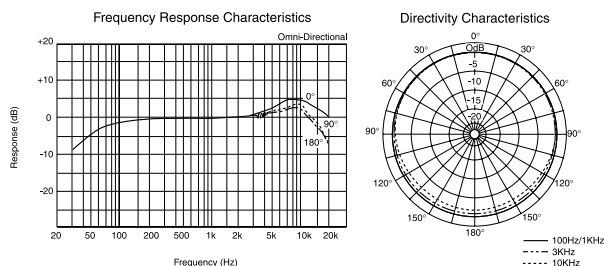
Microphone head:

2 g (0.07 oz)

Total:

121 g (4.3 oz)

*0 dB SPL = 2E-5 Pa.



ECM-44BC Lavalier Microphone

Features

- *Omni-directional, electret condenser microphone
- *Superior sound quality
- *SMC9-4P type connector for use with WRT-822A/822B/860A
- *Microphone head: 8.5 mm dia. x 14.5 mm (11/32 inch dia. x 19/32 inch), 2g (0.07 oz)
- *Microphone cable length: 1.2 m (3.9 feet)



Applicable Models

WRT-8B UHF Synthesized Transmitter
(6668U)

Supplied Accessories

Holder clip (single/horizontal type) (1)
Urethane wind screen (1)
Microphone case (1)

Optional Accessories

SAD-H44B Lavalier-Microphone Holder Clip
AD-R44B Urethane Windscreen

Specifications

Capsule type:
Electret condenser

Frequency response:
40 Hz to 15 kHz

Directivity:
Omni-directional

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):
-40 dB (10 mV)

Dynamic range:
90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,
1 Pa.):
62 dB or more

Inherent noise:
32 dB SPL or less

Wind noise (with wind screen, at 2 m/s):
40 dB SPL or less

Induction noise from external magnetic field
(dB SPL/(1E-7) T):
5 dB SPL or less

Max. input sound pressure level:
122 dB SPL

Output connector:
SMC9-4P type

Cable length:
1.2 m (3.9 feet)

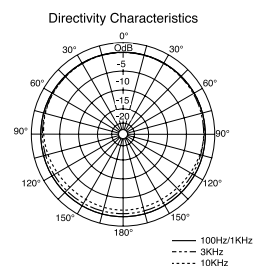
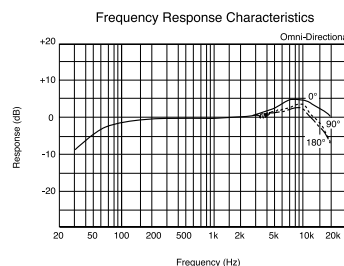
Normal operating voltage:
DC 3 V (supply range: DC 3 to 10 V)

Current drain:
0.3 mA or less

Dimensions (microphone head):
8.5 mm dia. x 14.5 mm
(11/32 inch dia. x 19/32 inch)

Mass (microphone head):
2 g (0.07 oz)

*0 dB SPL = 2E-5 Pa.



ECM-44BMP Lavalier Microphone

Features

- *Omni-directional, electret condenser microphone
- *Superior sound quality
- *3.5 mm dia., 3-pole mini plug for use with WRT-805A/805B
- *Microphone head: 8.5 mm dia. x 14.5 mm (11/32 inch dia. x 19/32 inch), 2g (0.07 oz)
- *Microphone cable length: 1.2 m (3.9 feet)

Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Urethane wind screen (1)
- Microphone case (1)

Optional Accessories

- SAD-H44B Lavalier-Microphone Holder Clip
- AD-R44B Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Frequency response:

40 Hz to 15 kHz

Directivity:

Omni-directional

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-40 dB (10 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

62 dB or more

Inherent noise:

32 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7 T):

5 dB SPL or less

Max. input sound pressure level:

122 dB SPL

Output connector:

3.5 mm dia., 3-pole mini plug

Cable length:

1.2 m (3.9 feet)

Normal operating voltage:

DC 3 V (supply range: DC 3 to 10 V)

Current drain:

0.3 mA or less

Dimensions (microphone head):

8.5 mm dia. x 14.5 mm

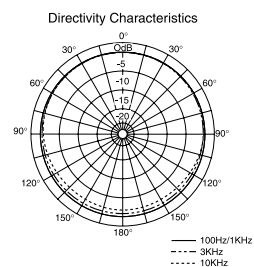
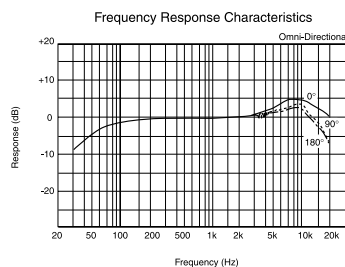
(11/32 inch dia. x 19/32 inch)

Mass (microphone head):

2 g (0.07 oz)



*0 dB SPL = 2E-5 Pa.



ECM-530 Electret Condenser Microphone

Features

- *Compact and high-quality table-top microphone
- *Goose-neck and extendable stem allow flexible microphone positioning for precise voice pick-up
- *2-way powering: internal AA-size battery or external power supply (DC 12 to 48 V)

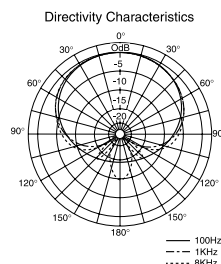
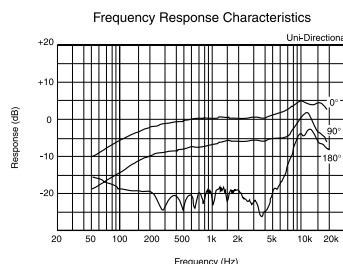
Supplied Accessories

- Operation manual (1)
- Wind screen (1)

Specifications

- Capsule type:
Electret condenser
- Frequency response:
70 Hz to 18 kHz
- Directivity:
Uni-directional
- Effective output level at 1 kHz (0 dB = 1 mW/1 Pa.):
-46.8 dBm
- Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):
-49.0 dB \pm 3.0 dB
- Output impedance at 1 kHz (balanced):
150 Ω \pm 20%
- Dynamic range:
95 dB or more
- Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.):
63 dB or more
- Inherent noise:
31 dB SPL or less
- Induction noise from external magnetic field (dB SPL/(1E-7) T):
5 dB SPL or less
- Wind noise:
55 dB SPL or less
- Max. Input sound pressure level:
126 dB SPL
- Microphone connector:
XLR-3-12C type
- Cable length:
2 m
- Available receptacle:
XLR-3-11C type
- Power supply:
Battery power (R6 or LR6) or external power supply (AC-148F or equivalent)
- Recommended Sony battery:
R6P (R6P battery life: approx. 5,000 h)
- Standard operating voltage:
Battery: 1.5 V
External power: DC 24 to 48 V
- Current drain:
Battery: 0.23 mA or less
AC power: 2 mA or less
- Dimensions:
12 dia. x 326 to 448 mm
86 dia. mm (Table Stand)
(1/2 dia. x 12 7/8 to 17 3/8 inches)
(Table stand: 3 1/2 dia. inches)
- Mass (without battery):
325 g (11.5 oz)

*0 dB SPL = 2E-5 Pa.



ECM-55B Lavalier Microphone

Features

*Omni-directional, electret condenser microphone
 *Complete with in-line battery unit for 2-way powering (AA-size battery or external power supply (DC 12 to 48 V)) *Frequency response tailored for enhanced presence and improved voice quality in lavalier applications *Microphone head: 10.6 mm dia. x 21 mm (7/16 inch dia. x 27/32 inch), 6.5 g (0.2 oz) *Mic cable length: 3.0 m (9.8 feet)



Supplied Accessories

Holder clip (single/horizontal type) (1)
 Holder clip (single/vertical type) (1)
 Metal wind screen (1)
 Microphone case (1)

Optional Accessories

AD-R55B Metal Windscreen
 SAD-H55B Lavalier-Microphone Holder Clip

Power unit:

20.0 mm dia. x 133 mm
 (13/16 inch dia. x 5 1/4 inches)

Mass:

Microphone head:
 6.5 g (0.23 oz)
 Total (without power unit):
 127 g (4.5 oz)

Specifications

Capsule type:

Electret condenser

*0 dB SPL = 2E-5 Pa.

Frequency response:

30 Hz to 18 kHz

Directivity:

Omni-directional

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-52.0 dB \pm 2 dB

Output impedance (at 1 kHz):

100 Ω \pm 20% (balanced)

Dynamic range:

98 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

66 dB or more

Inherent noise:

28 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

126 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

Battery:

R6 (1.5 V) (R6P battery life: approx.
 5,000 h)

Ext. power:

DC 12 to 48 V

Normal operating voltage:

DC 1.5 V

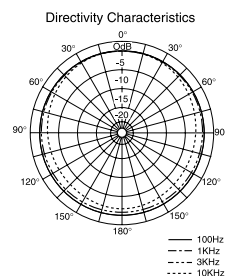
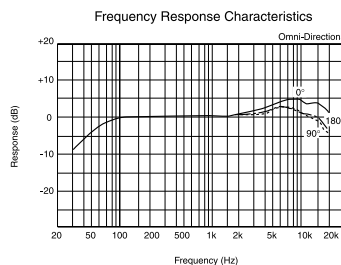
Current drain:

3.5 mA or less

Dimensions:

Microphone head:

10.6 mm dia. x 21 mm
 (7/16 inch dia. x 27/32 inch)



ECM-66B Lavalier Microphone

Features

*Designed for instrumental applications *Uni-directional electret condenser microphone *Complete with in-line battery unit for 2-way powering (AA-size battery or external power supply (DC 24 to 48 V)) *Max. 130 dB SPL input sound pressure level *Microphone head: 10.6 mm dia. x 24.3 mm (7/16 inch dia. x 31/32 inch), 7 g (0.24 oz) *Mic cable length: 3.0 m (9.8 feet)



Supplied Accessories

Holder clip (single/horizontal type) (1)
Holder clip (single/vertical type) (1)
Urethane wind screen (1)
Microphone case (1)

Optional Accessories

AD-R66B Urethane Windscreen
SAD-H55B Lavalier-Microphone Holder Clip

Power unit:

20.0 mm dia. x 163 mm
(13/16 inch dia. x 6 2/1 inches)

Mass:

Microphone head:
7 g (0.25 oz)
Total (without power unit):
167 g (5.9 oz)

Specifications

Capsule type:

Electret condenser

*0 dB SPL = 2E-5 Pa.

Directivity:

Uni-directional

Frequency response:

70 Hz to 14 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-50.0 dB \pm 2 dB

Output impedance (at 1 kHz):

100 Ω \pm 20% (balanced)

Dynamic range:

101 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

65 dB or more

Inherent noise:

29 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

50 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

130 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

Battery:

R6 (1.5 V) (R6P battery life: approx.
300 h)

Ext. power:

DC 24 to 48 V

Normal operating voltage:

DC 1.5 V

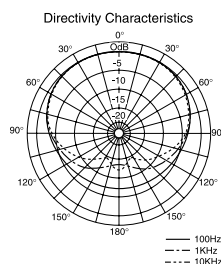
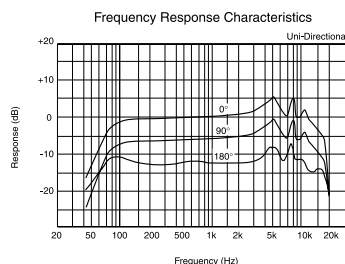
Current drain:

0.3 mA or less

Dimensions:

Microphone head:

10.6 mm dia. x 24.2 mm
(7/16 inch dia. x 31/32 inch)



ECM-670 Electret Condenser Microphone

Features

- *Shotgun-type electret condenser microphone
- *Super-cardioid microphone with minimum sensitivity to ambient noise
- *Compact and light weight design
- *Suitable for mounting on Sony cameras and camcorders
- *External power supply (DC 12 to 48 V)



Supplied Accessories

- Wind screen (1)
- Microphone holder (1)
- Microphone spacer (1)
- Stand adaptor (NS5/8) (1)
- Stand adaptor (W3/8) (1)

Specifications

Capsule type:

Electret condenser

Frequency response:

70 Hz to 16 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz (0 dBm =

1 mW/1 Pa.):

-43.0 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-44.0 dB \pm 3.0 dB

Output impedance at 1 kHz (balanced):

200 Ω \pm 20%

Dynamic range:

101 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

70 dB or more

Inherent noise:

24 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

0 dB SPL or less

Wind noise:

60 dB SPL or less

Max. Input sound pressure level:

125 dB SPL

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Power supply:

AC-148F or equivalent

Standard operating voltage:

DC12 to 48 V

Current drain:

2.4 mA or less

Dimensions:

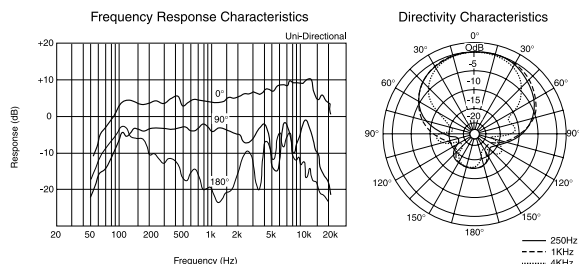
21 dia. x 226 mm

(27/32 dia. x 9 inches)

Mass:

165 g (5.8 oz)

*0 dB SPL = 2E-5 Pa.



ECM-672 Electret Condenser Microphone

Features

- *Shotgun-type electret condenser microphone
- *Super-cardioid characteristics, rejecting indirect sound
- *2-way powering: internal battery (Approx. 3,000 hours of continuous operation) or external power supply (DC 48 V)
- *2-position low-cut filter *Suitable for mounting on Sony cameras and camcorders

Supplied Accessories

Wind screen (1)

Specifications

Capsule type:

Electret condenser

Frequency response:

50 Hz to 16 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz (0 dB =

1 mW/1 Pa.):

-42.0 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-42.0 dB \pm 2.0 dB

Output impedance at 1 kHz (balanced):

250 Ω \pm 20%

Dynamic range:

92 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

72 dB or more

Inherent noise:

22 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

0 dB SPL or less

Wind noise:

45 dB SPL or less

Max. Input sound pressure level:

114 dB SPL

Tone control (low-cut):

M, V

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Power Supply:

Battery power (R6 or LR6) or external power supply (AC-148F or equivalent)

Recommended Sony battery:

R6P (R6P battery life: approx. 3,000 h)

Standard operating voltage:

Battery: 1.5 V

External power: DC 48 V

Current drain:

Battery: 0.3 mA or less

AC power: 0.5 mA or less

Dimensions:

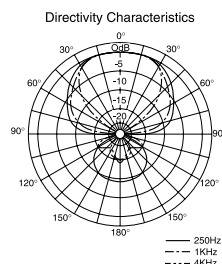
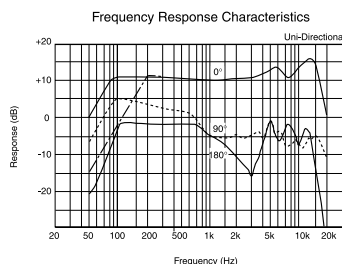
24 dia. x 304 mm

(31/32 dia. x 12 inches)

Mass (without battery):

230 g (8.1 oz)

*0 dB SPL = 2E-5 Pa.



ECM-678 Electret Condenser Microphone.

Features

*Shotgun-type electret condenser microphone *Superior sound quality *Flat and wide frequency response
*Compact design *Built-in low cut filter *High durability and reliability *Suitable for mounting on Sony cameras and camcorders

Supplied Accessories

Windscreen (x1)
Microphone holder (x1)
Microphone spacer (x1)
Carrying case (x1)
Operating instructions (x1)

Specifications

Capsule type
Electret condenser

Directivity
Uni-directional (Super-cardioid)

Frequency response
40 Hz to 20 kHz

Sensitivity (at 1 kHz)
-28 dB*1 \pm 3 dB

Output impedance (at 1 kHz)
200 Ω \pm 20%

Dynamic range
111 dB or more

Signal-to-noise ratio
78 dB or more
(IEC179 A-weighted, 1 kHz, 1Pa.)

Inherent noise
16 dB SPL*2 or less

Wind noise
60 dB SPL*2 or less

Induction noise from external magnetic field
0 dB SPL*2 or less

Maximum input sound pressure level
127 dB SPL*2

Power requirements
External, DC 48 V \pm 4 V

Dimensions
 ϕ 20 x 250 mm (ϕ 13/16 x 9 7/8 inches)

Mass
200 g (7 oz)



*1 0 dB=1 V/Pa., at 1 kHz

*2 0 dB SPL=20 μ Pa.

ECM-77B Lavalier Microphone

Features

- *High performance, ultra miniature microphone
- *Omni-directional, electret condenser microphone
- *Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- *Frequency response: 40 Hz to 20 kHz
- *Complete with in-line battery unit for 2-way powering (AA-size battery or external power supply (DC 12 to 48 V))
- *Mic cable length: 3.0 m (9.8 feet)



Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

Optional Accessories

- AD-KIT77 Lavalier-Microphone Accessory Kit
- SAD-H77B Lavalier-Microphone Holder Clip
- SAD-W77B Lavalier-Microphone Holder Clip
- SAD-V77B Lavalier-Microphone Holder Clip
- AD-C77B Urethane Windscreen
- AD-R77B Metal Windscreen
- AD-C77 Color Urethane Windscreen

Current drain:

0.4 mA or less

Dimensions:

Microphone head:

5.6 mm dia. x 12.5 mm
(1/4 inch dia. x 1/2 inch)

Power unit:

20.0 mm dia. x 133 mm
(13/16 inch dia. x 5 1/4 inches)

Mass:

Microphone head:
1.5 g (0.05 oz)

Total:
122 g (4.3 oz)

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-52.0 dB \pm 2 dB

Output impedance (at 1 kHz):

150 Ω \pm 20% (balanced)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.):

64 dB or more

Inherent noise:

30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

120 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

Battery:

R6 (1.5 V) (R6P battery life: approx.

5,000 h)

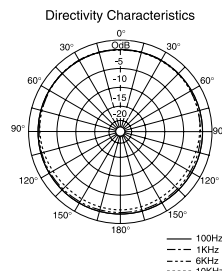
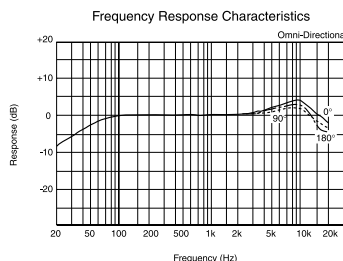
Ext. power:

DC 12 to 48 V

Normal operating voltage:

DC 1.5 V

*0 dB SPL = 2E-5 Pa.



ECM-77BC Lavalier Microphone

Features

- *High performance, ultra miniature microphone
- *Omni-directional, electret condenser microphone
- *Frequency response: 40 Hz to 20 kHz
- *Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- *1.2 m (3.9 feet) cable terminating in a SMC9-4P type connector for use with WRT-822A/822B/860A



Applicable Models

WRT-8B UHF Synthesized Transmitter

Supplied Accessories

Holder clip (single/horizontal type) (1)
 Holder clip (single/vertical type) (1)
 Metal wind screen (1)
 Microphone case (1)

Optional Accessories

AD-KIT77 Lavalier-Microphone Accessory Kit
 SAD-H77B Lavalier-Microphone Holder Clip
 SAD-W77B Lavalier-Microphone Holder Clip
 SAD-V77B Lavalier-Microphone Holder Clip
 AD-C77B Urethane Windscreen
 AD-R77B Metal Windscreen
 AD-C77 Color Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-39.0 dB (11.2 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

64 dB or more

Inherent noise:

30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

120 dB SPL

Output connector:

SMC9-4P type

Cable length:

1.2 m (3.9 feet)

Normal operating voltage:

DC 3 V (supply range: 3 to 10 V)

Current drain:

0.4 mA or less

Dimensions:

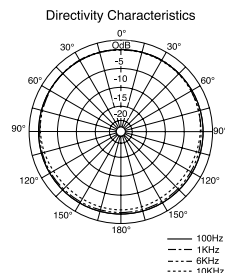
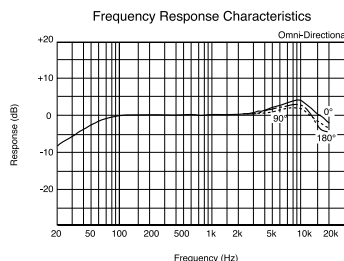
Microphone head:

5.6 mm dia. x 12.5 mm
 (1/4 inch dia. x 1/2 inch)

Mass (microphone head):

1.5 g (0.05 oz)

*0 dB SPL = 2E-5 Pa.



ECM-77BMP Lavalier Microphone

Features

- *High performance, ultra miniature microphone
- *Omni-directional, electret condenser microphone
- *Frequency response: 40 Hz to 20 kHz
- *Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- *1.2 m (3.9 feet) cable terminating in a 3.5 mm dia., 3-pole mini plug for use with WRT-805A/805B



Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

Optional Accessories

- AD-KIT77 Lavalier-Microphone Accessory Kit
- SAD-H77B Lavalier-Microphone Holder Clip
- SAD-W77B Lavalier-Microphone Holder Clip
- SAD-V77B Lavalier-Microphone Holder Clip
- AD-C77B Urethane Windscreen
- AD-R77B Metal Windscreen
- AD-C77 Color Urethane Windscreen

Specifications

Capsule type:
Electret condenser

Directivity:
Omni-directional

Frequency response:
40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):
-39.0 dB (11.2 mV)

Dynamic range:
90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.):
64 dB or more

Inherent noise:
30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):
40 dB SPL or less

Induction noise from external magnetic field (dB SPL/(1E-7) T):
5 dB SPL or less

Max. input sound pressure level:
120 dB SPL

Output connector:
3.5 mm dia., 3-pole mini plug

Cable length:
1.2 m (3.9 feet)

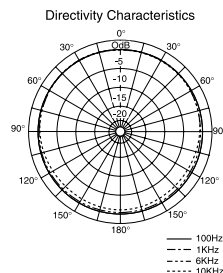
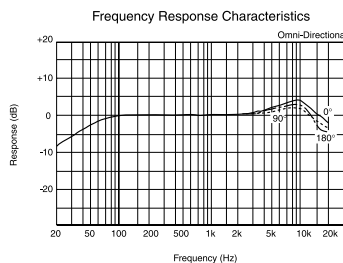
Normal operating voltage:
DC 3 V (supply range: 3 to 10 V)

Current drain:
0.4 mA or less

Dimensions:
Microphone head:
5.6 mm dia. x 12.5 mm
(1/4 inch dia. x 1/2 inch)

Mass (microphone head):
1.5 g (0.05 oz)

*0 dB SPL = 2E-5 Pa.



ECM-77BPT Lavalier Microphone

Features

- *High performance, ultra miniature microphone
- *Omni-directional, electret condenser microphone
- *Frequency response: 40 Hz to 20 kHz *Pigtail connection, without battery unit or connector
- *Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- *Mic cable length: 3.0 m (9.8 feet)

Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

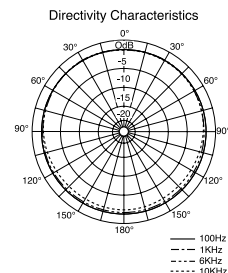
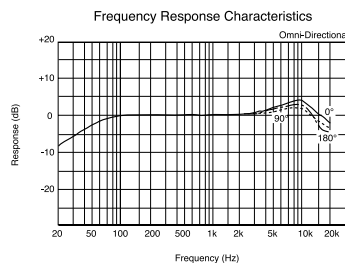
Optional Accessories

- AD-KIT77 Lavalier-Microphone Accessory Kit
- SAD-H77B Lavalier-Microphone Holder Clip
- SAD-W77B Lavalier-Microphone Holder Clip
- SAD-V77B Lavalier-Microphone Holder Clip
- AD-C77B Urethane Windscreen
- AD-R77B Metal Windscreen
- AD-C77 Color Urethane Windscreen

Specifications

- Capsule type:
 - Electret condenser
- Directivity:
 - Omni-directional
- Frequency response:
 - 40 Hz to 20 kHz
- Sensitivity (0 dB=1 V/Pa, at 1 kHz):
 - 39.0 dB (11.2 mV)
- Dynamic range:
 - 90 dB or more
- Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.):
 - 64 dB or more
- Inherent noise:
 - 30 dB SPL or less
- Wind noise (with wind screen, at 2 m/s):
 - 40 dB SPL or less
- Induction noise from external magnetic field (dB SPL/(1E-7) T):
 - 5 dB SPL or less
- Max. input sound pressure level:
 - 120 dB SPL
- Cable length:
 - 3.0 m (9.8 feet)
- Normal operating voltage:
 - DC 3 V (supply range: 3 to 10 V)
- Current drain:
 - 0.4 mA or less
- Dimensions:
 - Microphone head:
 - 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch)
- Mass (microphone head):
 - 1.5 g (0.05 oz)

*0 dB SPL = 2E-5 Pa.



ECM-88B Lavalier Microphone

Features

The ECM-88B is an extremely miniature, omni-directional electret condenser microphone ideal for quality-critical applications in broadcasting, theater, and field productions.

*Dual-diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics

*Water-resistant architecture *Flat-and-wide frequency response: 20 Hz to 20 kHz *Ultra-compact microphone capsule: 3.5 x 3.5 x 16.8 mm (5/32 x 5/32 x 11/16 inches)

*Supplied DC-78 DC Power Supply Unit enables two-way powering - internal AA-size (LR6) alkaline-battery operation or DC (12 to 48 V) operation *Mic cable length: 2.5 m (8.2 feet)

Supplied Accessories

Single/horizontal type tie clip (1)

Single/vertical type tie clip (1)

Double/horizontal type tie clip (1)

Urethane windscreen (1)

DC-78 (1)

Microphone case (1)

Ferrite clamp (1)

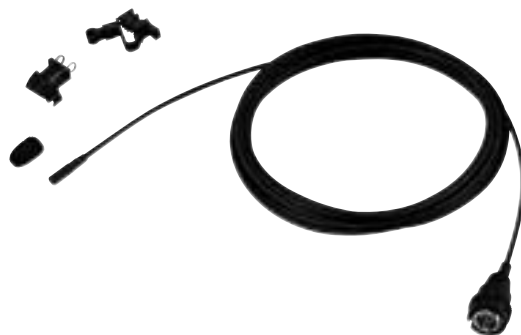
Operating instructions (1)



ECM-88BC Lavalier Microphone

Features

*Ultra miniature, omni-directional electret condenser microphone *Designed for use in broadcasting, theater, and field production applications *Dual -diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics *Water-resistant architecture *Flat-and-wide frequency response: 20 Hz to 20 kHz *Microphone head: 3.5 mm x 3.5 mm x 16.8 mm (5/32 x 5/32 x 11-16 inch) *2.5 m (8.2 feet) cable with a Sony 4-pin connector (SMC9-4P) for connection to the optional DC-78 power supply unit or the WRT-8B/822A/822B bodypack transmitter



ECM-88 with supplied accessories

Supplied Accessories

Carrying case (1)
Microphone holder (double-pin type) (1)
Microphone holder (tie-clip type) (1)
Urethane windscreen (1)

*10 dB = 1V/Pa., at 1 kHz

**0 dB SPL = 20μ Pa.

Optional Accessories

AD-KIT88 Lavalier-Microphone Accessory Kit
AD-C88 Color Urethane Windscreen
AD-R88B Urethane Windscreen
SAD-88B Lavalier-Microphone Holder Clip
SAD-P88 Lavalier-Microphone Holders
SAD-W88B Lavalier-Microphone Holder Adaptor
DC-78 Power Supply Unit

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

20 Hz to 20 kHz

Sensitivity (at 1 kHz):

-52 dB* ±2 dB (when used in combination with the DC-78)
-38 dB* (12.6 mV)

Output impedance (at 1 kHz):

100 Ω ±20% (when used in combination with the DC-78)
2.5 kΩ ±30%

Dynamic range:

99 dB or more

Signal-to-noise ratio:

68 dB or more (A-weighted, 1 kHz, 1Pa.)

Inherent noise:

26 dB SPL** or less (A-weighted, 1 kHz, 1Pa.)

Wind noise:

45 dB SPL** or less (when using the supplied windscreen)

Induction noise from external magnetic field:

5 dB SPL** or less (when used in combination with the DC-78)

Maximum input sound pressure level:

125 dB SPL**

Cable length:

2.5 m (8.2 feet)

Output connector:

Sony SMC9-4P

Power requirements:

DC 1.1 to 10.0 V

Dimensions (microphone capsule):

3.5 x 3.5 x 16.8 (h) mm
(5/32 x 5/32 x 11/16 inch)

Mass:

32 g (including microphone cable)

ECM-88BPT Lavalier Microphone

Features

*Ultra miniature, omni-directional electret condenser microphone *Designed for use in broadcasting, theater, and field production applications *Dual -diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics *Water-resistant architecture *Flat-and-wide frequency response: 20 Hz to 20 kHz *Microphone head: 3.5 mm x 3.5 mm x 16.8 mm (5/32 x 5/32 x 11-16 inch) *2.5 m (8.2 feet) cable without a connector (pig tail)

Supplied Accessories

Microphone holder (double-pin type) (1)
Microphone holder (tie-clip type) (1)
Urethane windscreen (1)
Operating instructions (1)

Optional Accessories

AD-KIT88 Lavalier-Microphone Accessory Kit
SAD-88B Lavalier-Microphone Holder Clip
SAD-P88 Lavalier-Microphone Holders
SAD-W88B Lavalier-Microphone Holder
Adaptor
AD-C88 Color Urethane Windscreen
AD-R88B Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

20 Hz to 20 kHz

Sensitivity (at 1 kHz):

-38 dB* (12.6 mV)

Output impedance (at 1 kHz):

2.5 k Ω \pm 30%

Dynamic range:

99 dB or more

Signal-to-noise ratio:

68 dB or more (A-weighted, 1 kHz, 1Pa.)

Inherent noise:

26 dB SPL** or less (A-weighted, 1 kHz, 1Pa.)

Wind noise:

45 dB SPL** or less (when using the supplied windscreen)

Induction noise from external magnetic field:

5 dB SPL** or less (when used in combination with the DC-78)

Maximum input sound pressure level:

125 dB SPL**

Cable length:

2.5 m (8.2 feet)

Output connector:

No connector (pig tail)

Power requirements:

DC 1.1 to 10.0 V

Dimensions (microphone capsule):

3.5 x 3.5 x 16.8 (h) mm
(5/32 x 5/32 x 11/16 inch)

Mass:

20 g (including microphone cable)

*10 dB = 1V/Pa., at 1 kHz ** 0 dB SPL = 20 μ Pa.



ECM-88FPT Lavalier Microphone

Features

*Ultra miniature, omni-directional electret condenser microphone *Designed for use in broadcasting, theater, and field production applications *Dual -diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics *Water-resistant architecture *Flat-and-wide frequency response: 20 Hz to 20 kHz *Beige color *Microphone head: 3.5 mm x 3.5 mm x 16.8 mm (5/32 x 5/32 x 11-16 inch) *2.5 m (8.2 feet) cable without a connector

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

20 Hz to 20 kHz

Sensitivity (at 1 kHz):

-38 dB* (12.6 mV)

Output impedance (at 1 kHz):

2.5 k Ω \pm 30%

Dynamic range:

99 dB or more

Signal-to-noise ratio:

68 dB or more (A-weighted, 1 kHz, 1Pa.)

Inherent noise:

26 dB SPL** or less (A-weighted, 1 kHz, 1Pa.)

Wind noise:

45 dB SPL** or less (when using the supplied windscreen)

Induction noise from external magnetic field:

5 dB SPL** or less (when used in combination with the DC-78)

Maximum input sound pressure level:

125 dB SPL**

Cable length:

2.5 m (8.2 feet)

Output connector:

No connector (pigtail)

Power requirements:

DC 1.1 to 10.0 V

Dimensions (microphone capsule):

3.5 x 3.5 x 16.8 (h) mm
(5/32 x 5/32 x 11/16 inch)

Mass:

32 g (including microphone cable)

*10 dB = 1V/Pa., at 1 kHz ** 0 dB SPL = 20 μ Pa.



F-710 Dynamic Microphone

Features

*For multi-purpose applications *Built-in TALK switch
 *High sensitivity with the Neodymium magnet *XLR-3-12C type connector *Frequency response: 70 Hz to 15 kHz
 *Dimensions (diameter x length): 54 x 177 mm (2 1/4 x 7 inches) *Mass: approx. 250 g (8.8 oz)



Supplied Accessories

Microphone holder (1)
 Stand adaptor (NS5/8) (1)
 Stand adaptor (W3/8) (1)

Optional Accessories

SAD-700 Microphone Holder
 A-12 Table Stand
 A-25 Table Stand
 A-25N Table Stand
 CRS-3P Cradle Suspension

Specifications

Capsule type:
 Dynamic
 Frequency response:
 70 Hz to 15 kHz
 Directivity:
 Uni-directional
 Effective output level at 1 kHz (0 dBm = 1 mW/1 Pa.):
 -56.0 dBm
 Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):
 -54.0 dB \pm 3.0 dB
 Output impedance at 1 kHz (balanced):
 400 Ω \pm 20%

Induction noise from external magnetic field

(dB SPL/(1E-7) T):
 5 dB SPL or less

Wind noise:

55 dB SPL or less

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Stand screw/mic holder screw:

PF1/2-inch thread

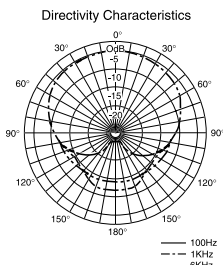
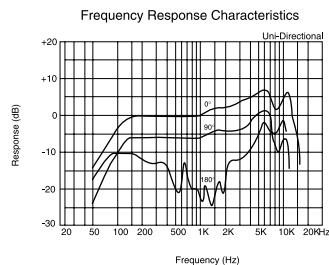
Dimensions (diameter x length):

54 x 177 mm (2 1/4 x 7 inches)

Mass:

250 g (8.8 oz)

* 0 dB SPL = 2E-5 Pa.



F-720 Dynamic Microphone

Features

*For multi-purpose applications *Convenient TALK switch for turning on and off the microphone *Vibration proof capsule suspension *XLR-3-12C type connector
 *Frequency response: 50 Hz to 13 kHz *Dimensions: 37.6 dia. x 160 mm (1 1/2 dia. x 6 3/8 inches)
 *Mass: approx. 260 g (9.2 oz)



Supplied Accessories

Microphone holder (1)
 Stand adaptor (NS5/8) (1)
 Stand adaptor (W3/8) (1)

Optional Accessories

A-12 Table Stand
 A-25 Table Stand
 A-25N Table Stand
 CRS-3P Cradle Suspension

Specifications

Capsule type:
 Dynamic
 Frequency response:
 50 Hz to 13 kHz
 Directivity:
 Uni-directional
 Effective output level at 1 kHz (0 dBm = 1 mW/1 Pa.):
 -60.0 dBm
 Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):
 -57.0 dB \pm 3.0 dB

Output impedance at 1 kHz (balanced):

500 Ω \pm 20%

Induction noise from external magnetic field

(dB SPL/(1E-7) T):
 10 dB SPL or less

Wind noise:

55 dB SPL or less

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Stand screw/mic holder screw:

PF1/2-inch thread

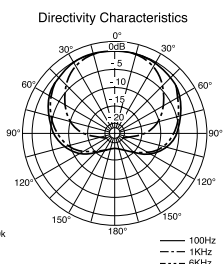
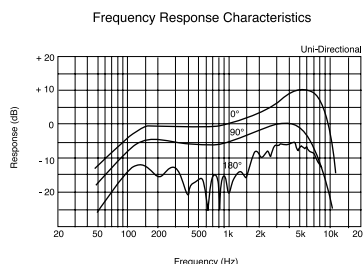
Dimensions (diameter x length):

37.6 x 160 mm (1 1/2 x 6 3/8 inches)

Mass:

260 g (9.2 oz)

* 0 dB SPL = 2E-5 Pa.



F-780 Dynamic Microphone

Features

*Designed specifically for critical vocal reproduction in music recording and live performance
 *Rugged capsules in a resilient body structure
 *Special AlNiCo Magnet
 *High quality edgewise winding CCAW (Copper Clad Aluminium Wire) voice coil
 *XLR-3-12C type connector
 *Frequency response: 50 Hz to 18 kHz
 *Dimensions: 51 dia. x 165 mm (2 1/8 dia. x 6 1/2 inches)
 *Mass: approx. 290 g (10.2 oz)

Supplied Accessories

Microphone holder (1)
 Stand adaptor (NS5/8) (1)
 Stand adaptor (W3/8) (1)

Specifications

Capsule type:

Dynamic

Frequency response:

50 Hz to 18 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz (0 dBm =

1 mW/1 Pa.):

-55.0 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-53.0 dB ± 2.0 dB

Output impedance at 1 kHz (balanced):

400 Ω $\pm 20\%$

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Wind noise:

50 dB SPL or less

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Stand screw/mic holder screw:

PF1/2-inch thread

Dimensions (diameter x length):

51 x 165 mm (1 1/8 x 6 1/2 inches)

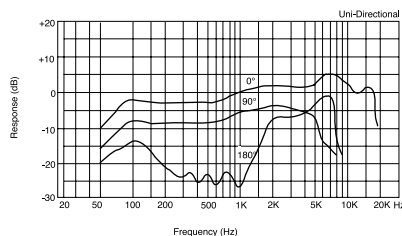
Mass:

290 g (10.2 oz)

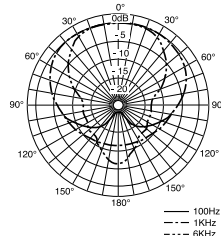


*0 dB SPL = 2E-5 Pa.

Frequency Response Characteristics



Directivity Characteristics



AD-KIT88B Microphone Accessory Kit

Features

The AD-KIT88B is a lavalier microphone accessory kit for the ECM-88 Series.

*Includes four types of microphone clips (single/horizontal, single/vertical, double/horizontal, and safety-pin type tie clip) and six urethane windscreens (red, yellow, green, blue, gray, and black)

Applicable Models

ECM-88B Lavalier Microphone

ECM-88BC Lavalier Microphone

ECM-88BPT Lavalier Microphone



SAD-H88B Lavalier-Microphone Holder Clip

Features

The SAD-H88B is a horizontal type lavalier microphone holder clip for the ECM-88 Series.

*Single/horizontal holder clip for the ECM-88 Series lavalier microphones *Black color *Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone

ECM-88BC Lavalier Microphone

ECM-88BPT Lavalier Microphone



SAD-V88B Lavalier-Microphone Holder Clip

Features

The SAD-V88B is a vertical type lavalier microphone holder clip for the ECM-88 Series.

*Single/vertical holder clip for the ECM-88 Series lavalier microphones *Black color *Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone

ECM-88BC Lavalier Microphone

ECM-88BPT Lavalier Microphone



SAD-W88BL Lavalier-Microphone Holder Clip

Features

The SAD-W88BL is a double/horizontal type lavalier microphone holder clip for the ECM-88 Series.

*Double/horizontal holder clip for the ECM-88 Series lavalier microphones *Black color *Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone

ECM-88BC Lavalier Microphone

ECM-88BPT Lavalier Microphone



SAD-S88B Lavalier-Microphone Holder Clip

Features

The SAD-S88B is a safety-pin type lavalier microphone holder clip for the ECM-88 Series.

*Safety-pin type holder clip for the ECM-88 Series lavalier microphones *Black color *Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone

ECM-88BC Lavalier Microphone

ECM-88BPT Lavalier Microphone



AD-KIT88 Lavalier-Microphone Accessory Kit

Features

*Designed for ECM-88 Series Lavalier microphones

*Includes two types of microphone holders (double-pin and tie-clip), a holder adaptor for dual-microphone operation, and six urethane windscreens (red, yellow, green, blue, gray, and black)

Applicable Models

ECM-88 Lavalier Microphone

ECM-88FPT Lavalier Microphone

ECM-88PT Lavalier Microphone



SAD-88B Lavalier-Microphone Holder Clip

Features

*Single, tie-clip type microphone holder for ECM-88 Series lavalier microphones *Black color *Six pieces are included.

Applicable Models

ECM-88 Lavalier Microphone

ECM-88FPT Lavalier Microphone

ECM-88PT Lavalier Microphone



SAD-P88 Lavalier-Microphone Holders

Features

*Double-pin type microphone holder for ECM-88 Series lavalier microphones *Black color *Six pieces are included.

Applicable Models

ECM-88 Lavalier Microphone

ECM-88FPT Lavalier Microphone

ECM-88PT Lavalier Microphone



SAD-W88B Lavalier-Microphone Holder Adaptor

Features

*Microphone holder adaptor for dual-microphone operation *Used in combination with SAD-P88 or SAD-88B microphone holder *Six pieces are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



AD-R88B Urethane Windscreen

Features

*Single/horizontal holder clip for the ECM-77 Series lavalier microphones *Black color *10 pieces are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



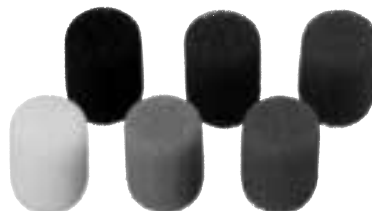
AD-C88 Color Urethane Windscreen

Features

*Designed for ECM-88 Series Lavalier microphones *Two sets of the six colors (red, yellow, green, blue, gray, and black) are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



AD-KIT77 Lavalier-Microphone Accessory Kit

Features

*Designed for ECM-77 Series Lavalier microphones
*Includes three types of microphone holders (horizontal/single type, vertical/single type, and horizontal/dual type) and six urethane windscreens (red, yellow, green, blue, gray, and black)

Applicable Models

ECM-77BC Lavalier Microphone
ECM-77BPT Lavalier Microphone



SAD-H77B Lavalier-Microphone Holder Clip

Features

*Single/horizontal holder clip for the ECM-77 Series lavalier microphones *Black color *10 pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone
ECM-88PT Lavalier Microphone



SAD-V77B Lavalier-Microphone Holder Clip

Features

*Single/vertical holder clip for the ECM-77 Series lavalier microphones *Black color *10 pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone



SAD-W77B Lavalier-Microphone Holder Clip

Features

*Double/vertical holder clip for the ECM-77 Series lavalier microphones *Black color *Six pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone



SAD-S77 Lavalier-Microphone Holder Clip

Features

*Safety pin-type holder clip for the ECM-77 Series lavalier microphones *Silver type *Six pieces are included.



AD-R77B Metal Windscreen

Features

*Designed for ECM-77 Series lavalier microphones

*Black color *Six pieces are included.

Applicable Models

ECM-77B Lavalier Microphone

ECM-77BC Lavalier Microphone

ECM-77BMP Lavalier Microphone

ECM-77BPT Lavalier Microphone



AD-C77B Urethane Windscreen

Features

*Designed for ECM-77 Series lavalier microphones

*Black color *12 pieces are included.

Applicable Models

ECM-77BC Lavalier Microphone

ECM-77BPT Lavalier Microphone



AD-C77 Color Urethane Windscreen

Features

*Designed for ECM-77 Series lavalier microphones *Two sets of the six colors (red, yellow, green, blue, gray, and black) are included.

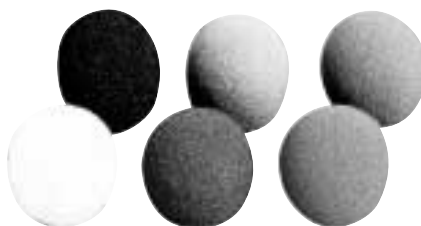
Applicable Models

ECM-77B Lavalier Microphone

ECM-77BC Lavalier Microphone

ECM-77BMP Lavalier Microphone

ECM-77BPT Lavalier Microphone



AD-R66B Urethane Windscreen

Features

*Designed for ECM-66 Series lavalier microphones

*Black color *12 pieces are included

Applicable Models

ECM-66B Lavalier Microphone

ECM-66BPT Lavalier Microphone

SAD-H55B Lavalier-Microphone Holder Clip

Features

- *Single/horizontal holder clip for the ECM-55 Series and ECM-66 Series lavalier microphones
- *Black color
- *10 pieces are included.

Applicable Models

Applicable model
ECM-55B Lavalier Microphone
ECM-55BPT Lavalier Microphone
ECM-66B Lavalier Microphone
ECM-66BPT Lavalier Microphone



AD-R55B Metal Windscreen

Features

- *Designed for ECM-55 Series lavalier microphones
- *Black color
- *Six pieces are included.

Applicable Models

ECM-55B Lavalier Microphone
ECM-55BPT Lavalier Microphone



SAD-H44B Lavalier-Microphone Holder Clip

Features

- *Single/horizontal holder clip for the ECM-44 Series lavalier microphones
- *Black color
- *10 pieces are included.

Applicable Models

ECM-44B Lavalier Microphone
ECM-44BC Lavalier Microphone
ECM-44BMP Lavalier Microphone
ECM-44BPT Lavalier Microphone



AD-R44B Urethane Windscreen

Features

- *Designed for ECM-44 Series lavalier microphones
- *Black color
- *12 pieces are included.

Applicable Models

ECM-44B Lavalier Microphone
ECM-44BC Lavalier Microphone
ECM-44BMP Lavalier Microphone
ECM-44BPT Lavalier Microphone



SONY

Wireless Microphones

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AN-820A UHF Antenna

Features

*Built-in RF amplifier (10 dB gain) *Easy installation on a wall or in a microphone stand with the supplied stand adaptor *Used in pairs for diversity reception *LED indication for installation check *External power supply provided from the MB-806A, WRR-850A/840A/820A or the WD-820A/880A via coaxial cable

Applicable Models

MB-806A UHF Tuner Base Unit (758 MHz to 862 MHz)

Supplied Accessories

Wall Bracket (1)

Microphone Stand Bracket (1)



CU-E672 Capsule Unit

Features

*Hyper cardioid electret condenser microphone capsule
*A wide variety of applications in news-gathering, sports events and interviews *The supplied windscreen reduces wind noise and popping

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter Unit

WRT-847B/67 UHF Synthesized Transmitter Unit

Supplied Accessories

Urethane windscreen (1)

Specifications

Directivity:

Uni-directional (hyper cardioid)

Frequency response:

50 Hz to 16 kHz

Max. sound pressure level:

120 dB

Dimensions:

φ37 x 172 mm

(φ1 1/2 x 6 7/8 inches)

Mass:

150 g (5.3 oz)



CU-E700 Capsule Unit

Features

*Electret condenser microphone capsule with super cardioid polar pattern *Smooth frequency response for natural sound re-production *Suitable for critical vocal and speech applications

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter Unit
WRT-847B/67 UHF Synthesized Transmitter Unit

Specifications

Directivity:

Uni-directional (super cardioid)

Frequency response:

50 Hz to 18 kHz

Max. sound pressure level:

150 dB

Dimensions:

φ51 x 98 mm

(φ2 1/8 x 3 7/8 inches)

Mass:

170 g (6 oz)



CU-F117 Capsule Unit

Features

*Dynamic microphone capsule with omni-directional polar pattern *Superb rejection for wind noise and popping *Designed for interview applications

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter Unit
WRT-847B/67 UHF Synthesized Transmitter Unit

Supplied Accessories

Urethane windscreen (1)

Specifications

Directivity:

Omni-directional

Frequency response:

50 Hz to 15 kHz

Dimensions:

φ44 x 105 mm

(φ1 3/4 x 4 1/4 inches)

Mass:

170 g (6 oz)



CU-F780 Capsule Unit

Features

*Dynamic microphone capsule with super cardioid polar pattern *Uses the same high quality edgewise winding CCAW voice coil that is employed in the acclaimed Sony F-780 wired microphone *Designed for vocal applications including live music performance

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter

Unit

WRT-847B/67 UHF Synthesized Transmitter

Unit

Specifications

Directivity:

Uni-directional (super cardioid)

Frequency response:

50 Hz to 18 kHz

Dimensions:

φ51 x 90 mm

(φ2 1/8 x 3 5/8 inches)

Mass:

180 g (6.3 oz)



CU-G780 Capsule Unit

Features

*Dynamic microphone capsule with super cardioid polar pattern *Special design, based on the capsule of F-780 microphone, to cope with high sound pressure level vocals and incorporating outstanding feedback rejection *Designed for vocal use

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter

Unit

WRT-847B/67 UHF Synthesized Transmitter

Unit

Specifications

Directivity:

Uni-directional (super cardioid)

Frequency response:

50 Hz to 20 kHz

Dimensions:

φ51 x 90 mm

(φ2 1/8 x 3 5/8 inches)

Mass:

180 g (6.3 oz)



EC-1.5CF Microphone Cable

Features

*Fitted with an XLR-3-11 connector and SMC9-4P connector *Allows a microphone with a 3-pin male XLR output connector to be connected to the WRT-822A/822B/8B bodypack transmitter *Cable length: 1.5 m (4.9 feet)



K-1334 BMP-XLR Conversion Cable (balanced)

Features

*3.5 mm dia. (5/32 inch dia.), 3-pole mini phone jack with a lock mechanism to XLR-3-12C type connector
*Designed for use with WRR-805A wireless portable tuner
*Cable length: 460 mm (1.5 feet)



MB-806A UHF Tuner Base Unit (758 MHz to 862 MHz)

Features

*Modular design, 1U height 19-inch rack *Accommodates up to six WRU-806A/806B for up to six simultaneous channels of operation *Use of AN-820A antennas and WD-820A or WD-880A antenna divider allows further multi-channel operation *Balanced XLR output connectors for each tuner and mix output *RF input attenuator switch (10 dB/0 dB) *Selectable output level: -58 dBm (for MIC) or -20 dBm (for LINE) at ± 5 kHz deviation at 1 kHz modulation *Space diversity reception for dependable RF reception *Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation. Automatically skips unusable channels and assigns clear channels. *Supplied passive antennas for rear mounting (with provision for front mounting)



(The WRU-806A/806B is not included.)



Supplied Accessories

Antenna (2)

AC power cord (1)

Optional Accessories

WRU-806B/62 UHF Synthesized Tuner Unit

WRU-806B/67 UHF Synthesized Tuner Unit

AN-820A UHF Antenna

Specifications

Receiving frequency range:

758 MHz to 862 MHz

Audio output level:

-20 dBm/-58 dBm at reference deviation

Audio output connector:

XLR-3-32 (x 7, balanced)

Antenna attenuator level:

0 dB or 10 dB

Antenna connector:

BNC-R type (x 2), 50 Ω (nominal)
impedance

Power requirements:

AC 220 to 240 V, 60 Hz

Power consumption:

30 W when accommodating six
WRU-806A/806B tuner modules

Power supply for antenna boosters:

DC 9 V (max. 100 mA)

Dimensions:

482 (W) x 44 (H) x 300 (D) mm
(19 x 1 3/4 x 11 7/8 inches)

Mass:

3.6 kg (7 lb 15 oz)

MB-8N Tuner Base Unit (CED)

Features

- *Uses a modular design to accommodate up to four WRU-8N receiver modules. The built-in antenna divider allows up to four MB-8N tuner base units to be daisy-chained to form a 16-channel system.
- *Wide system dynamic range: 116 dB (typical)
- *PLL (Phase Locked Loop) frequency synthesized system
- *Space diversity reception for dependable RF reception
- *Advanced control settings from MB-8N front panel
- *Headphone monitor jack on MB-8N front panel
- *Selectable output level: Mic or Line level
- *A D-sub 15-pin connector (unbalanced) for sub audio output
- *Computer-based control over a simple Ethernet environment using supplied software
- *Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation. Automatically skips unusable channels and assigns open channels.
- *AC/DC (auto switch) operation
- *Use of WD-880A antenna divider allows further multi-channel operation
- *1U high 19-inch rack mountable



(The WRU-8N tuner module is not included.)



Supplied Accessories

AC power code (1)
CD-ROM (contains operation instructions and supplied software) (1)

Optional Accessories

WRU-8N UHF Synthesized Tuner Unit (6264U)
WRU-8N UHF Synthesized Tuner Unit (6668U)

Specifications

MB-8N Tuner Base Unit

System dynamic range:

116 dB (typical)

Frequency response:

40 Hz to 20 kHz

Distortion:

1.0 % or less

Audio output level:

-20 dBm (LINE)/-58 dBm (MIC) at reference deviation

Audio output connector:

XLR-3-32 type (x 4), balanced

Sub-audio output connector:

D-sub 15-pin female, unbalanced

Antenna attenuator level:

0 dB, 5 dB, 10 dB or 15 dB

Antenna connector:

Inputs: BNC-R type (x 2), 50 Ω (nominal)

Outputs (for cascade connection): BNC-R type (x 2), 50 Ω (nominal)

Monitor output connector:

6.3 mm dia. stereo mini jack (x 1)

Monitor output level:

12 mW

Network connector:

RJ-45 (x 1), 10BASE-T

Power requirements:

AC 120 V, 50/60 Hz

DC 10 to 24 V

Power available for connected AN-820A

antennas:

9 V, max. 100 mA

Power consumption:

50 W when accommodating four WRU-8N tuner units

Dimensions (W x H x D):

482 x 44 x 300 mm

(19 x 1 3/4 x 11 7/8 inches)

Mass:

3.7 kg (8 lb 6 oz)

Supplied software for computer-based control

System requirements:

PC:

IBM PC/AT compatible

OS:

Windows 98SE/Windows 2000/
Windows Me/Windows NT 4.0 (ST6a)

Memory capacity:

128 MB RAM or more

CPU:

Intel Pentium 400 MHz or faster

Display:

1024 x 768 screen resolution or higher,
256 color display or higher

Network interface:

10/100 BASE-T Network interface card

Hard disc drive:

200 MB or more remaining, after MB-8N supplied software and other applications are installed.

UWP-C1/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

*Consists of an omni-directional lavalier microphone, bodypack transmitter and portable tuner *Suitable for a wide range of applications, from news gathering and interviews to talk shows and conferences *The transmitter and tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz *The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The portable tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the transmitter and tuner *An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time *The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone

Applicable Models

DSR-PD170 DVCAM Camcorder

Supplied Accessories

Windscreen (1)

Microphone-holder clip (1)

Belt clip (for the bodypack transmitter) (1)

Belt clip (for the portable tuner) (1)

Microphone stand adaptor (for the portable tuner) (1)

Screw adaptor (for use in combination with the microphone stand adaptor) (1)

Shoe-mount adaptor (1)

Output cable (3-pole mini-plug/XLR-type) (1)



Wireless Microphones

Specifications

- Lavalier Microphone

Microphone capsule:

Omni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1 kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V

(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Portable Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

15 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack
(x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack
(x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
LED: RF-input status

Power requirements:

DC 3.0 V

(Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
(2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dBV = 1 Vrms

UWP-C1/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

*Consists of an omni-directional lavalier microphone, bodypack transmitter and portable tuner *Suitable for a wide range of applications, from news gathering and interviews to talk shows and conferences *The transmitter and tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz *The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The portable tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the transmitter and tuner *An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time *The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone

Applicable Models

DSR-PD170 DVCAM Camcorder

Supplied Accessories

Windscreen (1)

Microphone-holder clip (1)

Belt clip (for the bodypack transmitter) (1)

Belt clip (for the portable tuner) (1)

Microphone stand adaptor (for the portable tuner) (1)

Screw adaptor (for use in combination with the microphone stand adaptor) (1)

Shoe-mount adaptor (1)

Output cable (3-pole mini-plug/XLR-type) (1)



Wireless Microphones

Specifications

- Lavalier Microphone

Microphone capsule:

Omni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1 kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V

(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Portable Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

15 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack (x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack (x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
LED: RF-input status

Power requirements:

DC 3.0 V

(Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
(2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dBV = 1 Vrms

UWP-C2/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- *Consists of a handheld microphone and portable tuner
- *Suitable for news gathering and for use in PA systems
- *The microphone and tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- *The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- *The portable tuner employs a space diversity reception system and angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the microphone and tuner
- *An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time



Supplied Accessories

Shoe-mount adaptor (1)
 Microphone holder (1)
 Screw adaptor (for use in combination with the microphone holder) (1)
 Microphone stand adaptor (for the portable tuner) (1)
 Screw adaptor (for use in combination with the microphone stand adaptor) (1)
 Belt clip (1)
 Output cable (3-pole mini plug/XLR-type) (1)

Specifications

Handheld microphone

Oscillator:
 Crystal-controlled PLL synthesizer
 Type of emission:
 F3E
 Carrier frequencies:
 798 MHz to 822 MHz (TV channels 62 to 64)
 RF power output:
 30 mW or 5 mW (selectable)
 Antenna:
 1/4 λ wave length wire
 Pilot tone signal:
 32 kHz
 System frequency response:
 100 Hz to 18 kHz (typical)
 Reference deviation:
 ± 5 kHz (94 dB SPL*, 1kHz input)
 System signal-to-noise ratio:
 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
 Microphone capsule:
 Dynamic capsule (uni-directional)
 Audio attenuator adjustable range:
 0 to 21 dB (in 3 dB steps)
 Max. input sound pressure level:
 151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
 LED: Power status

Power requirements:

DC 3.0 V
 (with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
 (2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Portable Tuner

Oscillator:
 Crystal-controlled PLL synthesizer
 Type of reception:
 Space diversity
 Receiving frequencies:
 798 MHz to 822 MHz (TV channels 62 to 64)
 Antenna:
 1/4 λ wave length wire
 Pilot-tone signal:
 32 kHz
 RF squelch level:
 15 dB μ
 System frequency response:
 100 Hz to 18 kHz (typical)
 Reference deviation:
 ± 5 kHz (at 1kHz modulation)
 System signal-to-noise ratio:
 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
 Audio output connector:
 3.5 mm (5/32 inch) dia., 3-pole mini jack (x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack (x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
 LED: RF-input status

Power requirements:

DC 3.0 V
 (Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
 (2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dB SPL = 20 μ Pa.

UWP-C2/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- *Consists of a handheld microphone and portable tuner
- *Suitable for news gathering and for use in PA systems
- *The microphone and tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- *The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- *The portable tuner employs a space diversity reception system and angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the microphone and tuner
- *An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time



Supplied Accessories

- Shoe-mount adaptor (1)
- Microphone holder (1)
- Screw adaptor (for use in combination with the microphone holder) (1)
- Microphone stand adaptor (for the portable tuner) (1)
- Screw adaptor (for use in combination with the microphone stand adaptor) (1)
- Belt clip (1)
- Output cable (3-pole mini plug/XLR-type) (1)

Specifications

Handheld microphone

Oscillator:
Crystal-controlled PLL synthesizer

Type of emission:
F3E

Carrier frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:
30 mW or 5 mW (selectable)

Antenna:
1/4 λ wave length wire

Pilot tone signal:
32 kHz

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (94 dB SPL*, 1kHz input)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:
Dynamic capsule (uni-directional)

Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time

LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Portable Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

15 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack (x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack (x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time

LED: RF-input status

Power requirements:

DC 3.0 V
(Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
(2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dB SPL = 20 μ Pa.

UWP-S1/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

*Consists of a uni-directional lavalier microphone, bodypack transmitter and half-rack-size tuner *Suitable for use in PA systems *The transmitter and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz *The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter *An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level *The bodypack transmitter is equipped with a 3.5 mm dia, 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone *The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

Windscreen (1)
Microphone-holder clip (1)
Belt clip (1)
AC/DC adaptor (1)

Specifications

Lavalier Microphone

Microphone capsule:
Uni-directional, electret condenser type

Bodypack Transmitter

Oscillator:
Crystal-controlled PLL synthesizer
Type of emission:
F3E
Carrier frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)
RF power output:
30 mW or 5 mW (selectable)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
Frequency response:
50 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (-60 dBV*, 1kHz input)
Signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)
Audio input level:
-60 dBV* (at 0 dB attenuator level)

Audio input connector:
3.5 mm (5/32 inch) dia., 3-pole mini jack
Indicators
LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status
Power requirements:
DC 3.0 V
(with two AA-size alkaline (LR6) batteries)
Battery life:
Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output
Dimensions:
63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)
Mass:
Approx. 140 g (4.9 oz) including batteries

Half 19-inch Rack-Size Tuner

Oscillator:
Crystal-controlled PLL synthesizer
Type of reception:
Space diversity
Receiving frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
RF squelch level:
25 dB μ

Frequency response:
50 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (at 1kHz modulation)
Signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
Audio output connector:
XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)
Audio output level:
XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)
1/4-inch phone jack: -30 dBm
Monitor output connector:
1/4-inch stereo mini jack (1)
Monitor output level:
5 mW (at 16 Ω)
Indicators
LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status
Power requirements:
DC 9.0 V
Dimensions:
212.0 (W) x 44.0 (H) x 209.0 (D) mm
(8 3/8 x 1 3/4 x 8 1/4 inches)
Mass:
Approx. 1.3 kg (2 lb 14 oz)

*0 dBV = 1 Vrms

UWP-S1/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

*Consists of a uni-directional lavalier microphone, bodypack transmitter and half-rack-size tuner *Suitable for use in PA systems *The transmitter and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz *The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter *An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level *The bodypack transmitter is equipped with a 3.5 mm dia, 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone *The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

Windscreen (1)
Microphone-holder clip (1)
Belt clip (1)
AC/DC adaptor (1)

Specifications

Lavalier Microphone

Microphone capsule:
Uni-directional, electret condenser type

Bodypack Transmitter

Oscillator:
Crystal-controlled PLL synthesizer
Type of emission:
F3E
Carrier frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)
RF power output:
30 mW or 5 mW (selectable)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
Frequency response:
50 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (-60 dBV*, 1kHz input)
Signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)
Audio input level:
-60 dBV* (at 0 dB attenuator level)

Audio input connector:
3.5 mm (5/32 inch) dia., 3-pole mini jack
Indicators
LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status
Power requirements:
DC 3.0 V
(with two AA-size alkaline (LR6) batteries)
Battery life:
Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output
Dimensions:
63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)
Mass:
Approx. 140 g (4.9 oz) including batteries

Half 19-inch Rack-Size Tuner

Oscillator:
Crystal-controlled PLL synthesizer
Type of reception:
Space diversity
Receiving frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
RF squelch level:
25 dB μ

Frequency response:
50 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (at 1kHz modulation)
Signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
Audio output connector:
XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)
Audio output level:
XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)
1/4-inch phone jack: -30 dBm
Monitor output connector:
1/4-inch stereo mini jack (1)
Monitor output level:
5 mW (at 16 Ω)
Indicators
LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status
Power requirements:
DC 9.0 V
Dimensions:
212.0 (W) x 44.0 (H) x 209.0 (D) mm
(8 3/8 x 1 3/4 x 8 1/4 inches)
Mass:
Approx. 1.3 kg (2 lb 14 oz)

*0 dBV = 1 Vrms

UWP-S2/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

*Consists of a handheld microphone and half-rack-size tuner *Suitable for use in PA systems *The microphone and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz *The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone *An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level *The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

Microphone holder (1)
Screw adaptor (for use in combination with the microphone holder) (1)
AC/DC adaptor (1)

Specifications

Handheld Microphone

Oscillator:
Crystal-controlled PLL synthesizer
Type of emission:
F3E
Carrier frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)
RF power output:
30 mW or 5 mW (selectable)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
System frequency response:
100 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz input)
System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
Microphone capsule:
Dynamic capsule (uni-directional)
Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)
Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status
Power requirements:
DC 3.0 V
(with two AA-size alkaline (LR6) batteries)
Battery life:
Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output
Dimensions:
52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)
Mass:
Approx. 300 g (10.6 oz) including batteries

Half 19-inch Rack-Size Tuner

Oscillator:
Crystal-controlled PLL synthesizer
Type of reception:
Space diversity
Receiving frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
RF squelch level:
25 dB μ
System frequency response:
100 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (at 1 kHz modulation)
System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)
Audio output level:
XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)
1/4-inch phone jack: -30 dBm
Monitor output connector:
1/4-inch stereo mini jack (1)
Monitor output level:
5 mW (at 16 Ω)
Indicators
LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status
Power requirements:
DC 9.0 V
Dimensions:
212.0 (W) x 44.0 (H) x 209.0 (D) mm
(8 3/8 x 1 3/4 x 8 1/4 inches)
Mass:
Approx. 1.3 kg (2 lb 14 oz)

*0 dB SPL = 20 μ Pa.

UWP-S2/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

*Consists of a handheld microphone and half-rack-size tuner *Suitable for use in PA systems *The microphone and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz *The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone *An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level *The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

Microphone holder (1)
Screw adaptor (for use in combination with the microphone holder) (1)
AC/DC adaptor (1)

Specifications

Handheld Microphone

Oscillator:
Crystal-controlled PLL synthesizer
Type of emission:
F3E
Carrier frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)
RF power output:
30 mW or 5 mW (selectable)
Antenna:
1/4 λ wave length wire
Pilot tone signal:
32 kHz
System frequency response:
100 Hz to 18 kHz (typical)
Reference deviation:
 ± 5 kHz (94 dB SPL*, 1kHz input)
System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
Microphone capsule:
Dynamic capsule (uni-directional)
Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)
Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Half 19-inch Rack-Size Tuner

Oscillator:
Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)

Audio output level:

XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)
1/4-inch phone jack: -30 dBm

Monitor output connector:

1/4-inch stereo mini jack (1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

212.0 (W) x 44.0 (H) x 209.0 (D) mm
(8 3/8 x 1 3/4 x 8 1/4 inches)

Mass:

Approx. 1.3 kg (2 lb 14 oz)

*0 dB SPL = 20 μ Pa.

UWP-X1/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

*Consists of a uni-directional lavalier microphone, bodypack transmitter and tuner module *Suitable for use in PA systems. Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit. *The transmitter and tuner module operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz *The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The tuner module incorporates a space diversity reception system and an RF squelch function *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter *An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level *The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone



Supplied Accessories

Windscreen (1)
Microphone-holder clip (1)
Belt clip (1)

Specifications

Lavalier Microphone

Microphone capsule:
Uni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Tuner Module

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:

Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

UWP-X1/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

*Consists of a uni-directional lavalier microphone, bodypack transmitter and tuner module *Suitable for use in PA systems. Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit. *The transmitter and tuner module operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz *The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level *The tuner module incorporates a space diversity reception system and an RF squelch function *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter *An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level *The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone



Supplied Accessories

Windscreen (1)
Microphone-holder clip (1)
Belt clip (1)

Specifications

Lavalier Microphone

Microphone capsule:
Uni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Tuner Module

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level

LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:

Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

UWP-X2/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- *Consists of a handheld microphone and tuner module
- *Suitable for use in PA systems. Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit. *The microphone and tuner module operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- *The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- *The tuner module incorporates a space diversity reception system and an RF squelch function
- *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone
- *An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level



Supplied Accessories

Microphone holder (1)
Screw adaptor (for use in combination with the microphone holder) (1)

Specifications

Handheld Microphone

Oscillator:
Crystal-controlled PLL synthesizer

Type of emission:
F3E

Carrier frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)

RF power output:
30 mW or 5 mW (selectable)

Antenna:
1/4 λ wave length wire

Pilot tone signal:
32 kHz

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (94 dB SPL*, 1kHz input)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:
Dynamic capsule (uni-directional)

Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators
LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:
DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Tuner Module

Oscillator:
Crystal-controlled PLL synthesizer

Type of reception:
Space diversity

Receiving frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)

Antenna:
1/4 λ wave length wire

Pilot-tone signal:
32 kHz

RF squelch level:
25 dB μ

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators
LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status

Power requirements:
DC 9.0 V

Dimensions:
56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:
Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

UWP-X2/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- *Consists of a handheld microphone and tuner module
- *Suitable for use in PA systems. Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit. *The microphone and tuner module operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- *The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- *The tuner module incorporates a space diversity reception system and an RF squelch function
- *Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone
- *An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- *An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level



Supplied Accessories

Microphone holder (1)
Screw adaptor (for use in combination with the microphone holder) (1)

Specifications

Handheld Microphone

Oscillator:
Crystal-controlled PLL synthesizer

Type of emission:
F3E

Carrier frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:
30 mW or 5 mW (selectable)

Antenna:
1/4 λ wave length wire

Pilot tone signal:
32 kHz

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz input)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:
Dynamic capsule (uni-directional)

Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators
LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:
DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Tuner Module

Oscillator:
Crystal-controlled PLL synthesizer

Type of reception:
Space diversity

Receiving frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:
1/4 λ wave length wire

Pilot-tone signal:
32 kHz

RF squelch level:
25 dB μ

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators
LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status

Power requirements:
DC 9.0 V

Dimensions:
56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:
Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

WD-850A UHF Antenna Divider (758 MHz to 862 MHz)

Features

*Provides diversity output for up to four receivers
*Multi-channel operation by combination with tuners such as the MB-8N and WRU-8N, or MB-806A and WRU-806/806B *Cascade output can be used for an additional antenna divider or receiver *Two pair of antenna input connectors for up to four AN-820A antennas to expand the operating area of a wireless microphone system *DC 9V power supply for the AN-820A UHF antennas via coaxial cable



Supplied Accessories	Dimensions (W x H x D):
50 ohms BNC terminators (6)	482 x 44 x 300 mm
	(19 x 1 3/4 x 11 7/8 inches)
Specifications	Mass:
Frequency range:	4.2 kg (9 lb 4 oz)
758 MHz to 862 MHz	
Channel distribution:	
Inputs: 2 pairs	
Outputs: 4 pairs	
Input/output Impedance:	
50 Ω	
Cascade output:	
1 pair	
Power supply for antenna booster (supplied from antenna input connectors):	
DC 9 V	
Power consumption:	
6 W +outlet 300 W max.	

WRR-855B/62 UHF Synthesized Diversity Tuner (62CE7)

Features

*Slot-in type space diversity tuner designed for use with Sony Betacam SX camcorders and HDCAM camcorder (HDW-750 only) *Weatherproof structure *Compact design and lightweight design; 280 g (9.9 oz) *A D-sub 15-pin connector for audio output to a Sony professional camcorder and for receiving its power supply from the HDCAM camcorder (HDW-750 only) or Betacam SX camcorder *Operates in the 798 MHz to 822 MHz (TV channels 62 to 64) UHF frequency band *LED indicators for AF/RF conditions *LCD indicator for operating channel *Switchable RF muting; ON (10 dB μ) or OFF *Use of the BTA-801 (optional portable tuner mount adaptor) allows the WRR-855B to be mounted on Sony professional camcorders and powered from the camcorder via a DC cable supplied with BTA-801 *Use of the CA-WR855 (optional camera adaptor) allows the WRR-855B to be mounted on Sony DSR-300/500WS DVCAM camcorders and powered from the camcorder.

Supplied Accessories

Antenna (2)

Specifications

Receiving channel:

1 channel

Receiving frequency:

798 MHz to 822 MHz

Oscillator:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

Reference deviation:

± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz modulation)

Selectivity:

60 dB or more at ± 250 kHz

Spurious rejection:

80 dB or more

Frequency range:

40 to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more at 60 dB μ RF input at reference deviation, A-weighted

RF muting level:

10 dB μ or OFF selectable

Audio output level:

-40 dBm at reference deviation

Audio output connector:

D-sub 15-pin (1), balanced

Antenna connector:

BNC-R type (2), 50 Ω (nominal)
impedance

Operating voltage:

DC 7 V

Current consumption:

200 mA or less at external DC 7 V

Dimensions (W x H x D):

88.0 x 119.0 x 31.3 mm
(3 1/2 x 4 3/4 x 1 1/4 inches)

Mass:

280 g (9.9 oz)



WRR-855B/67 UHF Synthesized Diversity Tuner (67CE7)

Features

*Slot-in type space diversity tuner designed for use with Sony Betacam SX camcorders and HDCAM camcorder (HDW-750 only) *Weatherproof structure *Compact design and lightweight design; 280 g (9.9 oz) *A D-sub 15-pin connector for audio output to a Sony professional camcorder and for receiving its power supply from the HDCAM camcorder (HDW-750 only) or Betacam SX camcorder *Operates in the 838 MHz to 862 MHz UHF frequency band (TV channels 67 and 69) *LED indicators for AF/RF conditions *LCD indicator for operating channel *Switchable RF muting; ON (10 dB μ) or OFF *Use of the BTA-801 (optional portable tuner mount adaptor) allows the WRR-855B to be mounted on Sony professional camcorders and powered from the camcorder via a DC cable supplied with BTA-801 *Use of the CA-WR855 (optional camera adaptor) allows the WRR-855B to be mounted on Sony DSR-300/500WS DVCAM camcorders and powered from the camcorder.

Supplied Accessories

Antenna (2)

Optional Accessories

CA-WR855 Camera Adaptor

BTA-801 Portable Tuner Mount Adaptor

Specifications

Receiving channel number:

1 channel

Receiving frequency:

838 MHz to 862 MHz

Oscillator:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

Reference deviation:

± 5 kHz deviation at 1 kHz modulation

(Max. deviation: ± 40 kHz modulation)

Selectivity:

60 dB or more at ± 250 kHz

Spurious rejection:

80 dB or more

Frequency range:

40 to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more at 60 dB μ RF input at reference deviation, A-weighted

RF muting level:

10 dB μ or OFF selectable

Audio output level:

-40 dBm at reference deviation

Audio output connector:

D-sub 15-pin (1), balanced

Antenna connector:

BNC-R type (2), 50 Ω (nominal) impedance

Operating voltage:

DC 7 V

Current consumption:

200 mA or less at external DC 7 V

Dimensions (W x H x D):

88.0 x 119.0 x 31.3 mm

(3 1/2 x 4 3/4 x 1 1/4 inches)

Mass:

280 g (9.9 oz)



WRR-862B/62 UHF Synthesized Dual Diversity Tuner (62CE7)

Features

- *Receives two independent RF signals on two separate channels
- *Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64)
- *A space diversity system is employed on both channels to eliminate signal dropout and provide stable reception
- *Compact and lightweight body; 400 g (14.1 oz) including batteries
- *Easily mounts on Sony professional camcorders with the supplied attachment kit and case (*)
- *Two SMC9-4S (Sony 4-pin) audio output connectors on the top panel
- *Rugged, diecast magnesium frame
- *LED indicators for each channel to indicate RF input level (green/red indication), diversity reception status and transmitter battery alarm
- *LCD screen for each channel to indicate operating channel/frequency, AF output level, RF input level, receiver battery status and accumulated battery operating time
- *Five hours of continuous operation with four AA-size (LR6) alkaline batteries
- *Capable of operating on external power from Sony camcorders via the supplied DC cable
- *Selectable RF squelch threshold: 5 dB μ , 10 dB μ , 15 dB μ and OFF
- *A stereo mini jack for monitoring the output sound (switchable: Tuner 1/2/mixed) with headphones (A monitor volume control is also included.)

(*) A-8278-057-A mounting bracket (service part) may also be required.



Applicable Models

MSW-900 MPEG IMX Camcorder
PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Supplied Accessories

Attachment case (1)
Mounting plate (1)
DC cable (1)
Output cable (2)
Antenna (2)

Specifications

Receiving channel number:
2 channels

Receiving frequencies:
2 frequencies within 798 MHz to 822 MHz

Local oscillators:
1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:
50 μ s

System dynamic range:
96 dB or more (101 dB typical)

Reference deviation:
 ± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz deviation at 1 kHz modulation)

Selectivity:
60 dB or more at ± 250 kHz

Spurious rejection:
70 dB or more

Frequency response:
40 Hz to 18 kHz (typical)

Signal-to-noise ratio:
60 dB or more (65 dB typical) at 60 dB μ
RF input at reference deviation,
A-weighted

RF squelch level:
5 dB μ , 10 dB μ , 15 dB μ or OFF

Audio output level:
-58 dBm at reference deviation

Audio output connector:
SMC9-4S (Sony 4-pin, x 2), balanced

Antenna connector:
BNC-R (x 2), 50 Ω (nominal) impedance

Monitor output:
3.5 mm dia. mini jack (x 1, 5 mW), Tuner 1/2/mixed selectable

Operating voltage:
Batteries: DC 6 V (four AA-size (LR6) alkaline batteries)
External: DC 12 V

Battery life:
Approx. 5 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Power consumption:
Batteries: approx. 230 mA at DC 6 V
External: approx. 135 mA at DC 12 V

Dimensions (W x H x D):
89.0 x 120.0 x 29.5 mm
(3 5/8 x 4 3/4 x 1 3/16 inches)

Mass:
Approx. 400 g (14.1 oz) including batteries

WRR-862B/67 UHF Synthesized Dual Diversity Tuner (67CE7)

Features

*Receives two independent RF signals on two separate channels *Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69) *A space diversity system is employed on both channels to eliminate signal dropout and provide stable reception *Compact and lightweight body; 400 g (14.1 oz) including batteries *Easily mounts on Sony professional camcorders with the supplied attachment kit and case (*) *Two SMC9-4S (Sony 4-pin) audio output connectors on the top panel *Rugged, diecast magnesium frame *LED indicators for each channel to indicate RF input level (green/red indication), diversity reception status and transmitter battery alarm *LCD screen for each channel to indicate operating channel/frequency, AF output level, RF input level, receiver battery status and accumulated battery operating time *Five hours of continuous operation with four AA-size (LR6) alkaline batteries *Capable of operating on external power from Sony camcorders via the supplied DC cable *Selectable RF squelch threshold: 5 dB μ , 10 dB μ , 15 dB μ and OFF *A stereo mini jack for monitoring the output sound (switchable: Tuner 1/2/mixed) with headphones (A monitor volume control is also included.)

(*) A-8278-057-A mounting bracket (service part) may also be required.



Supplied Accessories

Attachment case (1)
Mounting plate (1)
DC cable (1)
Output cable (2)
Antenna (2)

Specifications

Receiving channel number:
2 channels
Receiving frequencies:
2 frequencies within 838 MHz to 862 MHz
Local oscillators:
1st: PLL synthesizer, 2nd: Crystal oscillator
De-emphasis:
50 μ s
System dynamic range:
96 dB or more (101 dB typical)
Reference deviation:
 ± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz deviation at 1 kHz modulation)
Selectivity:
60 dB or more at ± 250 kHz
Spurious rejection:
70 dB or more
Frequency response:
40 Hz to 18 kHz (typical)
Signal-to-noise ratio:
60 dB or more (65 dB typical) at 60 dB μ
RF input at reference deviation,
A-weighted
RF squelch level:
5 dB μ , 10 dB μ , 15 dB μ or OFF
Audio output level:
-58 dBm at reference deviation

Audio output connector:

SMC9-4S (Sony 4-pin, x 2), balanced

Antenna connector:

BNC-R (x 2), 50 Ω (nominal) impedance

Monitor output:

3.5 mm dia. mini jack (x 1, 5 mW), Tuner 1/2/mixed selectable

Operating voltage:

Batteries: DC 6 V (four AA-size (LR6) alkaline batteries)
External: DC 12 V

Battery life:

Approx. 5 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Power consumption:

Batteries: approx. 230 mA at DC 6 V
External: approx. 135 mA at DC 12 V

Dimensions (W x H x D):

89.0 x 120.0 x 29.5 mm
(3 5/8 x 4 3/4 x 1 3/16 inches)

Mass:

Approx. 400 g (14.1 oz) including batteries

WRT-807B/62 UHF Synthesized Wireless Microphone (62CE7)

Features

*Dynamic microphone capsule that is employed in the Sony F-780 professional vocal microphone *High sound quality for vocals — powerful, crisp and clean sound
*Operates over a 24 MHz frequency band within the range of 798 to 822 MHz (TV channels 62 to 64)*LCD for display of operating channel, AF/RF conditions, attenuator, battery status and accumulated operating hours *Up to 5 hours of continuous operation with one AA-size (LR6) battery *10 mW RF power output
*Lockable external power switch *Transmits a low battery alarm to most Sony receivers



Supplied Accessories

Microphone holder (PF1/2 thread) (1)
Metal screw adaptor (PF1/2 to W3/8) (1)

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

798 to 822 MHz

Microphone capsule:

Dynamic

Directivity:

Uni-directional

RF power output:

10 mW (50 Ω load)

Antenna:

1/4 wave length wire antenna

Reference deviation:

± 5 kHz (94 dB SPL*, at 1 kHz)

Frequency response:

50 Hz to 15 kHz (typical)

Signal-to-noise ratio (A-weighted):

60 dB or more (A-weighted, at reference deviation)

Attenuator adjustment range (PAD):

0 dB to 21 dB, variable in 3 dB steps

Max. input sound pressure level:

151 dB SPL* (with 21 dB attenuator)

Operating voltage:

DC 1.5 V (one AA-size (LR6) alkaline battery)

Battery life:

Approx. 5 hours with Sony AA-size (LR6) alkaline battery at 25 °C (77 °F)

Dimensions (diameter x length):

51 x 238 mm (2 1/8 x 9 3/8 inches)

Mass:

440 g (15.5 oz) including battery

*0 dB SPL = 2E-5 Pa.

WRT-807B/67 UHF Synthesized Wireless Microphone (67CE7)

Features

*Dynamic microphone capsule that is employed in the Sony F-780 professional vocal microphone *High sound quality for vocals — powerful, crisp and clean sound
*Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 66 to 67)
*LCD for display of operating channel, AF/RF conditions, attenuator, battery status and accumulated operating hours *Up to 5 hours of continuous operation with one AA-size (LR6) battery *10 mW RF power output
*Lockable external power switch *Transmits a low battery alarm to most Sony receivers



Supplied Accessories

Microphone holder (PF1/2 thread) (1)
Metal screw adaptor (PF1/2 to W3/8) (1)

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

838 MHz to 862 MHz

Microphone capsule:

Dynamic

Directivity:

Uni-directional

RF power output:

10 mW (50 Ω load)

Antenna:

1/4 wave length wire antenna

Reference deviation:

± 5 kHz (94 dB SPL*, at 1 kHz)

Frequency response:

50 Hz to 15 kHz (typical)

Signal-to-noise ratio (A-weighted):

60 dB or more (A-weighted, at reference deviation)

Attenuator adjustment range (PAD):

0 dB to 21 dB, variable in 3 dB steps

Max. input sound pressure level:

151 dB SPL* (with 21 dB attenuator)

Operating voltage:

DC 1.5 V (one AA-size (LR6) alkaline battery)

Battery life:

Approx. 5 hours with Sony AA-size (LR6) alkaline battery at 25 °C (77 °F)

Dimensions (diameter x length):

51 x 238 mm (2 1/8 x 9 3/8 inches)

Mass:

440 g (15.5 oz) including battery

*0 dB SPL = 2E-5 Pa.

WRT-822B/62 UHF Synthesized Wireless Transmitter (62CE7)

Features

*Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries *Compact and lightweight body; 63 (W) x 103 (H) x 17 (D) mm (2 1/2 x 4 1/8 x 11/18 inches) *Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64) *Easy-to-read LCD for comprehensive system information such as channel number, channel frequency in MHz, AF, RF, attenuator, battery status, accumulated working time *20 mW RF power output *Accepts professional lavalier microphones fitted with SMC9-4P type connector

Supplied Accessories

Soft case (1)

Optional Accessories

ECM-350BC Headset Microphone

ECM-310BC Headset Microphone

ECM-77BC Lavalier Microphone

ECM-77SC Lavalier Microphone

ECM-77FC Lavalier Microphone

ECM-66BC Lavalier Microphone

ECM-55BC Lavalier Microphone

ECM-44BC Lavalier Microphone

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequency:

798 MHz to 822 MHz

RF power output:

20 mW (50 Ω load)

Antenna:

1/4 wave length whip antenna

Reference deviation:

± 5 kHz (-60 dBV, 1 kHz)

Frequency response:

70 Hz to 15 kHz (typical)

Signal-to-noise ratio:

60 dB (A-weighted, at reference deviation)

Attenuator adjustment range (pad):

0 to 21 dB, variable in 3 dB steps

Max. input level:

-3 dBV (with 21 dB attenuator)

Operating voltage:

DC 3 V (two AA-size (LR6) alkaline batteries)

Battery life:

Approx. 6 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Dimensions:

63 (W) x 103 (H) x 17 (D) mm
(2 1/2 x 4 1/8 x 11/16 inches)

Mass:

145 g (5.1 oz) including batteries

* 0 dBV = 1 V r.m.s.



WRT-822B/67 UHF Synthesized Wireless Transmitter (67CE7)

Features

*Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries *Compact and lightweight body; 63 (W) x 103 (H) x 17 (D) mm (2 1/2 x 4 1/8 x 11/16 inches) *Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69) *Easy-to-read LCD for comprehensive system information such as channel number, channel frequency in MHz, AF, RF, attenuator, battery status, accumulated working time *20 mW RF power output *Accepts professional lavalier microphones fitted with SMC9-4P type connector

Supplied Accessories

Soft case (1)

Optional Accessories

ECM-350BC Headset Microphone
ECM-310BC Headset Microphone
ECM-77BC Lavalier Microphone
ECM-77SC Lavalier Microphone
ECM-77FC Lavalier Microphone
ECM-66BC Lavalier Microphone
ECM-55BC Lavalier Microphone
ECM-44BC Lavalier Microphone

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequency:

838 MHz to 862 MHz

RF power output:

20 mW (50 Ω load)

Antenna:

1/4 wave length whip antenna

Reference deviation:

\pm 5 kHz (-60 dBV, 1 kHz)

Frequency response:

70 Hz to 15 kHz (typical)

Signal-to-noise ratio:

60 dB (A-weighted, at reference deviation)

Attenuator adjustment range (pad):

0 to 21 dB, variable in 3 dB steps

Max. input level:

-3 dBV (with 21 dB attenuator)

Operating voltage:

DC 3 V (two AA-size (LR6) alkaline batteries)

Battery life:

Approx. 6 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Dimensions:

63 (W) x 103 (H) x 17 (D) mm
(2 1/2 x 4 1/8 x 11/16 inches)

Mass:

145 g (5.1 oz) including batteries



* 0 dBV = 1 V_{r.m.s.}

WRT-847B/62 UHF Synthesized Transmitter Unit (62CE7)

Features

*A choice of five optional microphone capsules, each with specific characteristics to suit a range of different applications. (One capsule is required for the WRT-847B for function.) *Switchable audio compander time constant to suit different capsules *Selectable RF output level: 10 mW or 50 mW *Audio gain and attenuation settings within the range of +9 dB to -12 dB in 3 dB steps *Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 and 64) *Lockable external power switch (ON/OFF) *Easy-to-read LCD with back light indicates operating conditions such as channel number/frequency, audio input level, compander time constant, battery status and accumulated battery operating time *Eight hours of continuous operation with two AA-size (LR6) alkaline batteries *Transmits a low battery warning to most Sony receivers



Supplied Accessories

Microphone holder (1)
Stand adaptor (PF1/2 to NS5/8 type) (1)
Soft case (1)
Channel color seal (1)

Optional Accessories

CU-F780 Capsule Unit
CU-G780 Capsule Unit
CU-E700 Capsule Unit
CU-E672 Capsule Unit
CU-F117 Capsule Unit

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

798 MHz to 822 MHz

RF power output:

10 mW/50 mW selectable (50 Ω load)

Type of antenna:

1/4 wave length whip antenna

Pre-emphasis:

50 μ s

Reference deviation:

± 5 kHz (94 dB SPL*, 1 kHz)

Frequency response:

50 Hz to 18 kHz (typical)

Signal to noise ratio:

60 dB or more (A-weighted, at reference deviation)

Audio gain control:

-12 dB to 9 dB (in 3 dB steps)

Max. input sound pressure level:

142 dB SPL* (with
CU-F780/G780/E700/F117 at audio gain
-12 dB)
120 dB SPL* (with CU-E672)

Power requirements:

DC 3.0 V (two LR6 AA-size alkaline
batteries)

Battery life:

Approx. 8 hours at 25°C (77°F) with Sony
AA-size (LR6) alkaline batteries, at 10 mW
RF output

Dimensions (diameter x length):

37 x 150 mm (1 1/2 x 6 inches)

Mass:

Approx. 190 g (6.7 oz) including batteries

* 0 dB SPL = 2E-5 Pa.

WRT-847B/67 UHF Synthesized Transmitter Unit

Features

*A choice of five optional microphone capsules, each with specific characteristics to suit a range of different applications. (One capsule is required for the WRT-847B for function.) *Switchable audio compander time constant to suit different capsules *Selectable RF output level: 10 mW or 50 mW *Audio gain and attenuation settings within the range of +9 dB to -12 dB in 3 dB steps *Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 and 69) *Lockable external power switch (ON/OFF) *Easy-to-read LCD with back light indicates operating conditions such as channel number/frequency, audio input level, compander time constant, battery status and accumulated battery operating time *Eight hours of continuous operation with two AA-size (LR6) alkaline batteries *Transmits a low battery warning to most Sony receivers



Supplied Accessories

Microphone holder (1)
Stand adaptor (PF1/2 to NS5/8 type) (1)
Soft case (1)
Channel color seal (1)

Optional Accessories

CU-F780 Capsule Unit
CU-G780 Capsule Unit
CU-E700 Capsule Unit
CU-E672 Capsule Unit
CU-F117 Capsule Unit

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

838 MHz to 862 MHz

RF power output:

10 mW/50 mW selectable (50 Ω load)

Type of antenna:

1/4 wave length whip antenna

Pre-emphasis:

50 μ s

Reference deviation:

± 5 kHz (94 dB SPL*, 1kHz)

Frequency response:

50 Hz to 18 kHz (typical)

Signal to noise ratio:

60 dB or more (A-weighted, at reference deviation)

Audio gain control:

-12 dB to 9 dB (in 3 dB steps)

Max. input sound pressure level:

142 dB SPL* (with
CU-F780/G780/E700/F117 at audio gain
-12 dB)
120 dB SPL* (with CU-E672)

Power requirements:

DC 3.0 V (two LR6 AA-size alkaline
batteries)

Battery life:

Approx. 8 hours at 25°C (77°F) with Sony
AA-size (LR6) alkaline batteries, at 10 mW
RF output

Dimensions (diameter x length):

37 x 150 mm (1 1/2 x 6 inches)

Mass:

Approx. 190 g (6.7 oz) including batteries

* 0 dB SPL = 2E-5 Pa.

WRT-8B/62 UHF Synthesized Transmitter (62CE7)

Features

*Extremely compact and lightweight: 140 g including batteries, 63 (W) x 83 (H) x 17 (D) mm *Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64) *Selectable RF output powers: 10 mW or 50 mW *Switchable input level: LINE level or MIC level *Variable audio attenuator *Approx. 13 hours of continuous operation with two AA-size (LR6) alkaline batteries at 10 mW output (Approx. six hours of operation at 50 mW output) *Removable antenna with SMA connector *LCD screen indicates extensive information such as operating channel/frequency, audio input level, RF output level, transmitter battery status and accumulated operating time *A red LED indicator flashes when the AF level exceeds a designated level *Transmits a low battery warning to Sony receivers *Rugged, die-cast magnesium frame *Accepts the output of lavalier microphones fitted with a Sony SMC9-4P connector

Supplied Accessories

Soft case (1)
Spare battery case (1)
Microphone cable (1)

Optional Accessories

ECM-77BC Lavalier Microphone
ECM-77FC Lavalier Microphone
ECM-66BC Lavalier Microphone
ECM-55BC Lavalier Microphone
ECM-44BC Lavalier Microphone
ECM-310BC Headset Microphone
ECM-350BC Headset Microphone

Specifications

Oscillator:

Crystal-controlled PLL synthesizer

Carrier frequencies:

798 MHz to 822 MHz

Oscillator:

Crystal controlled PLL synthesizer

RF power output:

50 mW/10 mW (e.r.p.) selectable

Antenna:

1/4 wavelength wire (SMA-J type connector)

Frequency response:

40 Hz to 20 kHz (typical)

Reference deviation:

±5 kHz (-60 dBV, 1 kHz input, MIC position)

±5 kHz (-20 dBu, 1 kHz input, LINE position)

Signal-to-noise ratio:

60 dB or more (A-weighted)

Attenuator adjustment range:

0 to 40 dB, continuous

Max. input level:

-2 dBV (1 kHz input, MIC position)
+38 dBu (1 kHz input, LINE position)

Audio input level:

MIC level/LINE level switchable

Audio input connector:

Sony SMC9-4S type

Power requirements:

DC 3.0 V (with two LR6 alkaline batteries)

Battery life:

Approx. 6 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 50 mW output
Approx. 13 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 10 mW output

Dimensions:

63 (W) x 83 (H) x 17 (D) mm
(2 1/2 x 3 3/8 x 11/16 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries



WRT-8B/67 UHF Synthesized Transmitter (67CE7)

Features

*Extremely compact and lightweight: 140 g including batteries, 63 (W) x 83 (H) x 17 (D) mm *Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69) *Selectable RF output powers: 10 mW or 50 mW *Switchable input level: LINE level or MIC level *Variable audio attenuator *Approx. 13 hours of continuous operation with two AA-size (LR6) alkaline batteries at 10 mW output (Approx. six hours of operation at 50 mW output) *Removable antenna with SMA connector *LCD screen indicates extensive information such as operating channel/frequency, audio input level, RF output level, transmitter battery status and accumulated operating time *A red LED indicator flashes when the AF level exceeds a designated level *Transmits a low battery warning to Sony receivers *Rugged, die-cast magnesium frame *Accepts the output of lavalier microphones fitted with a Sony SMC9-4P connector

Supplied Accessories

Soft case (1)
Spare battery case (1)
Microphone cable (1)

Optional Accessories

ECM-77BC Lavalier Microphone
ECM-77FC Lavalier Microphone
ECM-66BC Lavalier Microphone
ECM-55BC Lavalier Microphone
ECM-44BC Lavalier Microphone
ECM-310BC Headset Microphone
ECM-350BC Headset Microphone

Specifications

Oscillator:

Crystal-controlled PLL synthesizer

Carrier frequencies:

838 MHz to 862 MHz

Oscillator:

Crystal controlled PLL synthesizer

RF power output:

50 mW/10 mW (e.r.p.) selectable

Antenna:

1/4 wavelength wire (SMA-J type connector)

Frequency response:

40 Hz to 20 kHz (typical)

Reference deviation:

±5 kHz (-60 dBV, 1 kHz input, MIC position)

±5 kHz (-20 dBu, 1 kHz input, LINE position)

Signal-to-noise ratio:

60 dB or more (A-weighted)

Attenuator adjustment range:

0 to 40 dB, continuous

Max. input level:

-2 dBV (1 kHz input, MIC position)
+38 dBu (1 kHz input, LINE position)

Audio input level:

MIC level/LINE level switchable

Audio input connector:

Sony SMC9-4S type

Power requirements:

DC 3.0 V (with two LR6 alkaline batteries)

Battery life:

Approx. 6 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 50 mW output
Approx. 13 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 10 mW output

Dimensions:

63 (W) x 83 (H) x 17 (D) mm
(2 1/2 x 3 3/8 x 11/16 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries



WRU-806B/62 UHF Synthesized Tuner Unit (62CE7)

Features

*Dedicated plug-in diversity receiver for MB-806A tuner base unit
*Operates within the range of 798 MHz to 822 MHz (TV channels 62 and 64)
*Auto channel assignment for extra receiver modules with self-detection and skipping of unusable channels
*Pre-programmed groups for inter-modulation free operation of multi-channel system
*AF, RF and transmitter's low-battery alarm indication by both LED and LCD to double check operating condition
*Use of SAW filters for exceptional rejection of unwanted signals while maintaining the best signal integrity of the desired signals
*Space diversity reception for dependable RF reception



Applicable Models
MB-806A UHF Tuner Base Unit

Specifications
Receiving channel:
1 channel
Receiving frequency:
798 MHz to 822 MHz
Oscillator:
1st: PLL synthesizer, 2nd: Crystal oscillator
De-emphasis:
50 μ s
Reference Deviation:
 ± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz deviation at 1 kHz modulation)

Selectivity:
60 dB or more at ± 250 kHz
Spurious rejection ratio:
70 dB or more
Frequency range:
70 Hz to 18 kHz (typical)
Signal-to-noise ratio:
60 dB or more at 60 dB μ RF input at reference deviation, A-weighted
RF muting level:
30 dB μ
Operating voltage:
DC 9 V
Current consumption:
225 mA or less

Dimensions (W x H x D):
57 x 26 x 122 mm
(2 1/4 x 1 1/16 x 4 7/8 inches)
Mass:
160.0 g (5.7 oz)

WRU-806B/67 UHF Synthesized Tuner Unit (67CE7)

Features

*Dedicated plug-in diversity receiver for MB-806A tuner base unit
*Operates within the range of 822 MHz to 862 MHz (TV channels 67 and 69)
*Auto channel assignment for extra receiver modules with self-detection and skipping of unusable channels
*Pre-programmed groups for inter-modulation free operation of multi-channel system
*AF, RF and transmitter's low-battery alarm indication by both LED and LCD to double check operating condition
*Use of SAW filters for exceptional rejection of unwanted signals while maintaining the best signal integrity of the desired signals
*Space diversity reception for dependable RF reception



Applicable Models
MB-806A UHF Tuner Base Unit

Specifications
Receiving channel:
1 channel
Receiving frequency:
838 MHz to 862 MHz
Oscillator:
1st: PLL synthesizer, 2nd: Crystal oscillator
De-emphasis:
50 μ s

Reference Deviation:
 ± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz deviation at 1 kHz modulation)
Selectivity:
60 dB or more at ± 250 kHz
Spurious rejection ratio:
70 dB or more
Frequency range:
70 Hz to 18 kHz (typical)
Signal-to-noise ratio:
60 dB or more at 60 dB μ RF input at reference deviation, A-weighted

RF muting level:
30 dB μ
Operating voltage:
DC 9 V
Current consumption:
225 mA or less
Dimensions (W x H x D):
57 x 26 x 122 mm
(2 1/4 x 1 1/16 x 4 7/8 inches)
Mass:
160.0 g (5.7 oz)

WRU-8N/62 UHF Synthesized Tuner Unit (62CE7)

Features

- *Plug-in diversity receiver for MB-8N Tuner Base Unit
- *Jog dial control for channel number/group selection
- *Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64)
- *LCD screen displays operating channel/frequency and RF level
- *LED indicators display space diversity reception status, AF input status and a low battery warning of Sony transmitters
- *Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation. Automatically skips unusable channels and assigns open channels.
- *Space diversity reception for stable RF reception



Applicable Models

MB-8N Tuner Base Unit (U2)

Specifications

Receiving channel:

1 channel

Receiving frequencies:

798 MHz to 822 MHz

Local oscillators:

PLL synthesizer

Reference deviation:

±5 kHz deviation at 1 kHz modulation

(Maximum deviation: ±40 kHz at 1 kHz modulation)

Signal-to-noise ratio:

60 dB or more (65 dB typical) at 60 dBμ RF input at reference deviation, A-weighted

Selectivity:

60 dB or more at ±250 kHz detuned

RF squelch level:

10 dBμ, 20 dBμ, 30 dBμ or off

De-emphasis:

50 μs

Power consumption:

DC 5 V (supplied from MB-8N)

Dimensions (W x H x D):

56.0 x 30.7 x 149.0 mm

(2 1/4 x 1 1/4 x 5 7/8 inches)

Mass:

165 g (5.8 oz)

WRU-8N/67 UHF Synthesized Tuner Unit (67CE7)

Features

- *Plug-in diversity receiver for MB-8N Tuner Base Unit
- *Jog dial control for channel number/group selection
- *Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69)
- *LCD screen displays operating channel/frequency and RF level
- *LED indicators display space diversity reception status, AF input status and a low battery warning of Sony transmitters
- *Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation. Automatically skips unusable channels and assigns open channels.
- *Space diversity reception for stable RF reception



Applicable Models

MB-8N Tuner Base Unit (U2)

Specifications

Receiving channel:

1 channel

Receiving frequencies:

838 MHz to 862 MHz

Local oscillators:

PLL synthesizer

Reference deviation:

±5 kHz deviation at 1 kHz modulation

(Maximum deviation: ±40 kHz at 1 kHz modulation)

Signal-to-noise ratio:

60 dB or more (65 dB typical) at 60 dBμ RF input at reference deviation, A-weighted

Selectivity:

60 dB or more at ±250 kHz detuned

RF squelch level:

10 dBμ, 20 dBμ, 30 dBμ or off

De-emphasis:

50 μs

Power consumption:

DC 5 V (supplied from MB-8N)

Dimensions (W x H x D):

56.0 x 30.7 x 149.0 mm

(2 1/4 x 1 1/4 x 5 7/8 inches)

Mass:

165 g (5.8 oz)

SONY

Monitor Equipment

MDR-7502	420
MDR-7505	421
MDR-7506	422
MDR-7509	423

MDR-7502 Stereo Headphones

Features

*Designed to fit securely over the ear, these headphones ensure a high-degree of air-tightness and soundproofing
*The diaphragm, which is made of a high-molecule film, and the copper-clad aluminum voice coil reproduce high quality extended frequency sound
*Neodymium magnet is used to deliver deep bass and clear treble sound
*These headphones are equipped with a stereo unimatch plug which can be connected to a jack of either the mini or the phone type
*The headphone cord is a litz wire which reduces conductive loss at high frequencies

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Supra-aural, closed

Driver units:

30 mm dia., dynamic type

Diaphragm:

PET

Magnet:

Neodymium

Impedance:

24 Ω at 1 kHz

Sensitivity:

100 dB/mW

Power handling capacity:

500 mW

Frequency response:

60 Hz to 18 kHz

Cord:

2 m cord with a gold-plated stereo mini plug cord

Mass (without cord):

150 g (5.2 oz)



MDR-7505 Stereo Headphones

Features

- *Professional monitoring headphones for DJ, remix, and studio
- *Swivel mechanism allows easy single sided monitoring in various wearing positions
- *Round design of ear pads allows the DJs to listen in various positions, with consistent audio quality
- *Acoustical characteristics is designed to position sound image very close to the ears, thus, enabling easy sound monitoring in noisy environment
- *40 mm driver unit for high quality sound
- *Neodymium magnet for powerful bass and clear treble sound
- *Reversible earcup design for easy single sided monitoring
- *Coiled, LC-OFC cord for high quality transmission
- *Screw type gold plated stereo unimatch plug for secure connection
- *Convenient folding design

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Supra-aural, closed

Driver units:

40 mm dia., dynamic type

Diaphragm:

PET

Magnet:

Neodymium

Impedance:

40 Ω

Sensitivity:

106 dB/mW

Power handling capacity:

1,000 mW

Frequency response:

10 Hz to 25 kHz

Cord:

Coiled, single sided, 1 to 3 m LC-OFC litz cord with a gold plated stereo mini plug

Headband:

Wide single headband (folding mechanism)

Mass (without cord):

220 g (7.7 oz)



MDR-7506 Stereo Headphones

Features

*Professional monitoring headphones *Comfortable, auranomic design (circum aural headphones, earcup covering the entire ear) *40 mm driver unit for high quality sound *Neodymium magnet is used to deliver deep bass and clear treble sound *Utilizing diaphragms constructed of 16 μ m high-molecule film and copper-clad aluminum voice coil, these headphones deliver high quality sound along a wide frequency range *The headphone cord is an oxygen-free copper litz wire which provides maximum conductivity *The coiled headphone cord extends user's action radius to 3 meters *Useful clicking scales on the slide bar *Convenient folding design *Self-closing mechanism prevents sound leakage when headphones are taken off

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Circum-aural, closed

Driver units:

40 mm dia., dynamic type

Impedance:

63 Ω at 1 kHz

Sensitivity:

106 dB/mW

Power handling capacity:

1000 mW

Frequency response:

10 Hz to 20 kHz

Cord:

Coiled, single sided, 1 to 3 m OFC litz cord with a gold-plated stereo mini plug

Mass (without cord):

230 g (8.1 oz)



MDR-7509 Stereo Headphones

Features

- *Professional monitoring headphones
- *Resists high power input up to 3000 mW
- *Comfortable, auranomic design (circum aural headphones, earcup covering the entire ear)
- *50 mm driver unit for high quality sound
- *Neodymium magnet for powerful bass and clear treble sound
- *Amorphous diamond evaporated diaphragm for natural sound reproduction
- *Reversible earcup design for easy single sided monitoring
- *Coiled, LC-OFC class 1 litz cord for minimum signal transmission loss
- *Screw-type gold plated stereo unimatch plug for secure connection
- *Convenient folding design
- *Self-closing mechanism prevents sound leakage when headphones are taken off

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Circum-aural, closed

Driver units:

50 mm dia., dynamic type

Diaphragm:

Amorphous diamond evaporated

Magnet:

Neodymium

Impedance:

24 Ω

Sensitivity:

107 dB/mW

Power handling capacity:

3,000 mW

Frequency response:

5 Hz to 30 kHz

Cord:

Coiled, single sided, 1 to 3 m LC-OFC class1 litz cord with a gold-plated stereo mini plug

Headband:

Wide single headband (folding mechanism)

Mass (without cord):

300 g (10.5 oz)



SONY

Common Accessories

RMM-10	426
RMM-111	426

RMM-10 Rack Mount Kit

Rack mount kit for PFV-L10

RMM-111 Rack Mount Kit

Rack Mount Kit for Betacam SX series VTRs

Applicable Models

DNW-75 Betacam SX Recorder
DNW-75P Betacam SX Recorder
DNW-A65 Betacam SX Player
DNW-A65P Betacam SX Player
DNW-A75 Betacam SX Recorder
DNW-A75P Betacam SX Recorder



Recording Media

PFD23 Disc 428

PFD23 Disc Professional Disc

Professional optical disc for XDCAM products
PFD23

Features

- *Large disc capacity of 23-GB, allowing long recordings of MPEG IMX and DVCAM signals
- *Uses the state-of-the-art blue laser technology
- *High transfer rate of 72 Mb/s from a single optical head (144 Mb/s on a dual head deck)
- *Specially designed, dust and shock-proof cartridge
- *Highly reliable and durable medium
- *Can be re-used more than 1000 times



Applicable Models

- PDW-1500 XDCAM Compact Deck (Recording and Playback)
- PDW-510 XDCAM Camcorder (DVCAM Recording)
- PDW-510P XDCAM Camcorder (DVCAM Recording)
- PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
- PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)
- PDW-V1 XDCAM Mobile Deck (Playback and File Recording)

- Data transfer (writing) rate: 72 Mb/s (per optical head)
- Disc diameter: 120 mm (4 5/8 inches)
- Cartridge dimensions: 129 (W) x 131 (H) x 9 (D) mm (5 1/8 x 5 1/4 x 3/8 inches)
- Mass: 90 g (3 oz)
- Recording format: Phase change recording

Specifications

- Storage capacity: 23.3 GB
- Laser wavelength: 405 nm (blue-violet)



CCA-5 Cables	430
CCA-7 Cables	430
CCDC Cables	430
CCDC-A Cables	431
CCFC-M100 Cable	431
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RCC-R Cable	438
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VMC-IL46 Cables	439
VMC-IL66 Cables	439

CCA-5 Cables 8-pin/8-pin Remote Control Cable

CCA-5-10
CCA-5-3

Features

*CNU-700/500—CCU-700A/550A, MSU-700, RCP-700,
RM-P9 series and VCS-700 *Sony Camcorder series—
RM-P9 *Sony Camcorder series—RM-B150

Applicable Models

HDCU-900 Camera Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control
type)

Specifications

CCA-5-10:
10m (33ft)
CCA-5-3:
3m (10ft)

CCA-7 Cables 10-pin/10-pin Cable

CCA-7-25
CCA-7-5
CCA-7-50

Features

*10-pin (male) / 10-pin (female) *RM-M7G / DXC-D35/300/327B
series *RM-M7G / CCU-M7/M5 *RM-M7G / CA-325A/325B

Applicable Models

DSR-390K1 DVCAM Camcorder
DSR-390K2 DVCAM Camcorder
DSR-390L DVCAM Camcorder
DSR-390PK1 DVCAM Camcorder
DSR-390PK2 DVCAM Camcorder
DSR-390PL DVCAM Camcorder
RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)

Specifications

CCA-7-5:
5 m (16.5 ft)
CCA-7-25:
25 m (82 ft)
CCA-7-50:
50 m (165 ft)
CCA-7-100:
100 m (330 ft)

CCDC Cables 12-pin/4-pin DC Cables

CCDC-10
CCDC-100
CCDC-25
CCDC-5
CCDC-50

Features

* 12-pin (female) <>4-pin (male) *
DXC-LS1/107A/950/9000/390/990 Series <> CMA-D2

Applicable Models

DXC-390 3-CCD Color Video Camera
DXC-390P 3-CCD Color Video Camera
DXC-9000 3-CCD Color Video Camera
DXC-9100P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera
DXC-LS1 CCD Color Video Camera
DXC-LS1P CCD Color Video Camera

Specifications

CCDC-5:
5 m (16.4 ft)
CCDC-10:
10 m (32 ft)
CCDC-25:
25 m (82 ft)



CCDC-A Cables 12-pin/4-pin Cable

CCDC-100A
CCDC-50A

Features

- *12-pin (female) / 4-pin (male)
- *DXC-LS1/107A/950/9000/390 / CMA-D2

Applicable Models

DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera

Specifications

CCDC-50A:
50 m (164 ft)
CCDC-100A:
100 m (330 ft)



CCFC-M100 Cable Optical Fiber Cable

CCFC-M100

Applicable Models

BRC-300 3-CCD Color Video Camera
BRU-300 Optical Multiplex Unit

Specifications

Cable length
Approx. 100 m



CCFD-L Cable DV Cable (6-pin to 4-pin)

CCFD-3L

Features

6-pin to 4-pin

Applicable Models

DSR-11 Recorder
DSR-1500A Editing Recorder
DSR-1500AP Editing Recorder
DSR-1600 Editing Player
DSR-1600P Editing Player
DSR-1800 Editing Recorder
DSR-1800P Editing Recorder
DSR-2000 Editing Recorder

DSR-2000P Editing Recorder
DSR-250/1 DVCAM Camcorder
DSR-250P/1 DVCAM Camcorder
DSR-50 Portable Recorder
DSR-50P Portable Recorder
DSR-DR1000 Video Disc Recorder
DSR-DR1000P Video Disc Recorder
DSR-25 Recorder
DSR-45P Recorder

DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
HVR-Z1E HDV Camcorder
HVR-M10E HDV Recorder

CCF-L Cable DV Cable (6-pin to 6-pin)

CCF-3L

Features

6-pin to 6-pin

Applicable Models

DSR-1500A Editing Recorder
DSR-1500AP Editing Recorder
DSR-1600 Editing Player
DSR-1600P Editing Player
DSR-1800 Editing Recorder
DSR-1800P Editing Recorder
DSR-2000 Editing Recorder
DSR-2000P Editing Recorder
DSR-250/1 DVCAM Camcorder
DSR-250P/1 DVCAM Camcorder
DSR-50 Portable Recorder
DSR-50P Portable Recorder
DSR-DR1000 Video Disc Recorder
DSR-DR1000P Video Disc Recorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder



CCMC-12 Cables 12-pin/12-pin Multi Core Cables

CCMC-12P02
CCMC-12P05
CCMC-12P10
CCMC-12P25

Features

12-pin (male) <> 12-pin (female) *

DXC-LS1/107A/950/9000/390/990 Series <> CMA-D2

Applicable Models

DXC-390 3-CCD Color Video Camera
DXC-390P 3-CCD Color Video Camera
DXC-9000 3-CCD Color Video Camera
DXC-9100P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera
DXC-LS1 CCD Color Video Camera
DXC-LS1P CCD Color Video Camera

Specifications

CCMC-12P02:

2 m (6.4 ft)

CCMC-12P05:

5 m (16.4 ft)

CCMC-12P10:

10 m (33 ft)

CCMC-12P25:

25 m (82 ft)



CCMC-3MZ Cable

CCMC-3MZ

Features

For connection of CMA-D3/D3CE, capable of connecting to the CCZ-A2/A5/A10/A25/A50/A100 cables (3 m)

Applicable Models

DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera

CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin

CCMC-9DS

Features

* 9-pin D-sub (male) <-> BNCs (R/G/B/SYNC, male), DIN 4-pin (Y/C, male)* 5 m (16.4 ft)* For video output from DXC-390/990

Applicable Models

BRC-300 3-CCD Color Video Camera
DXC-390 3-CCD Color Video Camera
DXC-390P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera
DXC-C33 3-CCD Color Video Camera
DXC-C33P 3-CCD Color Video Camera



CCT Cables Triax Cable

CCT-100

CCT-150

CCT-300

CCT-50

Features

*BVP-E30 series to CCU-700AP or CCU-550DP *DXC-D50 series to CCU-TX50P

Specifications

CCT-50:

50 m (164 ft)

CCT-100:

100 m (328 ft)

CCT-150:

150 m (492 ft)

CCT-300:

300 m (984 ft)

CCXC-12P Cables EIAJ 12-pin Cables

CCXC-12P02N
CCXC-12P05N
CCXC-12P10N
CCXC-12P25N

Features

EIAJ 12pin cables

CCXC-6P Cable Trigger Cable

CCXC-6P05

Features

Trigger Cables

CCXC-9DB Cable 9-pin/9-pin Cable

CCXC-9DB

Features

RGB Cable, 9-pin male - 5 m

Applicable Models

DXC-C33 3-CCD Color Video Camera
DXC-C33P 3-CCD Color Video Camera

CCXC-9DBS Cable 9-pin/5BNCs Cable

CCXC-9DBS

Features

*9-pin D-sub (male) <—> BNCs (R/G/B/SYNC/VBS)
(male) *5m (16.4 ft) *For video output from
DXC-950/950P/390/390P

Applicable Models

BRC-300 3-CCD Color Video Camera
DXC-390 3-CCD Color Video Camera
DXC-390P 3-CCD Color Video Camera
DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera



CCXC-9DD Cable 9-pin/9-pin Cable

CCXC-9DD

Features

*9-pin D-sub (male) <—> 9-pin D-sub (male) *5m (16.4 ft)
*For video output from DXC-950/950P/390

Applicable Models

DXC-990 3-CCD Color Video Camera
DXC-990P 3-CCD Color Video Camera
DXC-C33 3-CCD Color Video Camera
DXC-C33P 3-CCD Color Video Camera

CCXC-T20 Cables ccu to CHU cables

CCXC-T20P02

CCXC-T20P05

CCXC-T20P10

Specifications

CCXC-T20P02:

2 m

CCXC-T20P05:

5 m

CCXC-T20P10:

10 m

CCZ-A Cables 26-pin/26-pin Cable

CCZ-A10
CCZ-A100
CCZ-A2
CCZ-A25
CCZ-A5
CCZ-A50

Features

- *26-pin (male) <—> 26-pin (female)
- *DXC-D50P/D50WSP series <—> CCU-M50P



Applicable Models

- CA-D50 Camera Adaptor
- CCU-D50 Camera Control Unit
- CCU-D50P Camera Control Unit
- DXC-390 3-CCD Color Video Camera
- DXC-390P 3-CCD Color Video Camera
- DXC-D50PH 3-chip CCD Portable Color Camera
- DXC-D50PK 3-chip CCD Portable Color Camera
- DXC-D50PL 3-chip CCD Portable Color Camera
- DXC-D50WSPL 3-chip CCD Portable Color Camera
- DXC-H10 3-CCD Color Video Camera

Specifications

- CCZ-A2 : 2m (6.5 ft)
- CCZ-A5 : 5m (16.5 ft)
- CCZ-A10 : 10m (33 ft)
- CCZ-A25 : 25m (82 ft)
- CCZ-A50 : 50m (164 ft)
- CCZ-A100 : 100m (330 ft)

RCC-5AA Cable 9-pin/15-pin Audio mixer control cable

RCC-5AA

Features

- *9-pin (male) <—> 15-pin (female), 5m (16ft) *PVE-500
- <—> MXP-290



RCC-G Cable 9-pin/9-pin Cable

RCC-5G

Features

*9-pin (male) <—> 9-pin (male)



Applicable Models

BVM-14F1E Color Video Monitor
 BVM-14F1U Color Video Monitor
 BVM-14F5E Color Video Monitor
 BVM-14F5U Color Video Monitor
 BVM-14G1E Color Video Monitor
 BVM-14G1U Color Video Monitor
 BVM-14G5E Color Video Monitor
 BVM-14G5U Color Video Monitor
 BVM-20F1E Color Video Monitor
 BVM-20F1U Color Video Monitor
 BVM-20G1E Color Video Monitor
 BVM-20G1U Color Video Monitor
 BVM-D14H1E Color Video Monitor
 BVM-D14H1U Color Video Monitor
 BVM-D14H5E Color Video Monitor
 BVM-D14H5U Color Video Monitor
 BVM-D24E1WE Color Video Monitor
 BVM-D24E1WU Color Video Monitor
 BVM-D32E1WE Color Video Monitor
 BVM-D32E1WU Color Video Monitor
 BVM-D9H1E Color Video Monitor
 BVM-D9H1U Color Video Monitor
 BVM-D9H5E Color Video Monitor
 BVM-D9H5U Color Video Monitor
 DNW-75 Betacam SX Recorder
 DNW-75P Betacam SX Recorder
 DNW-A65 Betacam SX Player
 DNW-A65P Betacam SX Player
 DNW-A75 Betacam SX Recorder
 DNW-A75P Betacam SX Recorder
 DSR-1500A Editing Recorder
 DSR-1500AP Editing Recorder
 DSR-1600 Editing Player
 DSR-1600P Editing Player
 DSR-1800 Editing Recorder
 DSR-1800P Editing Recorder
 DSR-2000 Editing Recorder
 DSR-2000P Editing Recorder
 DSR-DR1000 Video Disc Recorder
 DSR-DR1000P Video Disc Recorder
 DVW-2000 Digital Betacam Recorder
 DVW-2000P Digital Betacam Recorder
 DVW-500 Digital Betacam Recorder
 DVW-500P Digital Betacam Recorder
 DVW-A500 Digital Betacam Recorder
 DVW-A500 Digital Betacam Recorder (With Advanced Control Panel)
 DVW-A500P Digital Betacam Recorder
 DVW-A500P Digital Betacam Recorder (With Advanced Control Panel)
 DVW-M2000 Digital Betacam Recorder
 DVW-M2000P Digital Betacam Recorder
 HDW-2000 HDCAM VTR
 HDW-M2000 HDCAM VTR
 HDW-M2000P HDCAM VTR
 HDW-M2100 HDCAM Player

HDW-M2100P HDCAM Player
 MSW-2000 MPEG IMX Recorder
 MSW-A2000 MPEG IMX Recorder
 MSW-A2000 MPEG IMX Recorder (/1 model)
 MSW-A2000P MPEG IMX Recorder
 MSW-A2000P MPEG IMX Recorder (/1 model)
 MSW-M2000 MPEG IMX Recorder
 MSW-M2000 MPEG IMX Recorder (/1 model)
 MSW-M2000P MPEG IMX Recorder
 MSW-M2000P MPEG IMX Recorder (/1 model)
 MSW-M2100 MPEG IMX Player
 MSW-M2100 MPEG IMX Player (/1 model)
 MSW-M2100P MPEG IMX Player
 MSW-M2100P MPEG IMX Player (/1 model)
 PC-3000 Signal Interface Switcher
 PDW-1500 XDCAM Compact Deck
 (Recording and Playback)

Specifications

RCC-5G :
 5 m (16 ft)
 RCC-10G :
 10 m (33 ft)
 RCC-30G :
 30 m (99 ft)

RCC-R Cable Cascade Connection Cable

RCC-5R

Specifications

RCC-5R

5m

VMC-IL44 Cables 4-pin <-> 4-pin i.LINK Cable

VMC-IL4415

VMC-IL4435

Applicable Models

- DSR-11 Recorder
- DSR-25 Recorder
- DSR-45 Recorder
- DSR-45P Recorder
- DSR-PD170 DVCAM Camcorder
- DSR-PD170P DVCAM Camcorder
- DSR-PDX10 DVCAM Camcorder
- DSR-PDX10P DVCAM Camcorder
- HVR-Z1E HDV Camcorder
- HVR-M10E HDV Recorder

Specifications

VMC-IL4415:

1.5 m(5 ft)

VMC-IL4435:

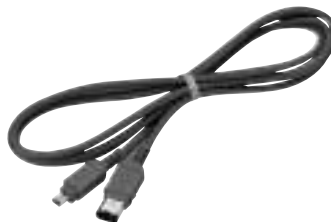
3.5 m(12 ft)



VMC-IL4415

VMC-IL46 Cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL4615
VMC-IL4635



VMC-IL4615

Applicable Models

DSR-11 Recorder
DSR-25 Recorder
DSR-250/1 DVCAM Camcorder
DSR-250P/1 DVCAM Camcorder
DSR-45 Recorder
DSR-45P Recorder
DSR-50 Portable Recorder
DSR-50P Portable Recorder
DSR-PD170 DVCAM Camcorder
DSR-PD170P DVCAM Camcorder
DSR-PDX10 DVCAM Camcorder
DSR-PDX10P DVCAM Camcorder
DXC-C33 3-CCD Color Video Camera
DXC-C33P 3-CCD Color Video Camera
HVR-Z1E HDV Camcorder
HVR-M10E HDV Recorder
PDW-1500 XDCAM Compact Deck
(Recording and Playback)

PDW-510 XDCAM Camcorder (DVCAM
Recording)
PDW-510P XDCAM Camcorder (DVCAM
Recording)
PDW-530 XDCAM Camcorder (MPEG
IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG
IMX/DVCAM Recording)
PDW-V1 XDCAM Mobile Deck (Playback and
File Recording)

Specifications

VMC-IL4615:
1.5 m(5 ft)
VMC-IL4635:
3.5 m(12 ft)

VMC-IL66 Cables 6-pin <-> 6-pin i.LINK Cable

VMC-IL6615
VMC-IL6635



VMC-IL6615

Applicable Models

DSR-250/1 DVCAM Camcorder
DSR-250P/1 DVCAM Camcorder
DSR-50 Portable Recorder
DSR-50P Portable Recorder
DXC-C33 3-CCD Color Video Camera
DXC-C33P 3-CCD Color Video Camera
PDW-1500 XDCAM Compact Deck
(Recording and Playback)
PDW-510 XDCAM Camcorder (DVCAM
Recording)
PDW-510P XDCAM Camcorder (DVCAM
Recording)
PDW-530 XDCAM Camcorder (MPEG
IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG
IMX/DVCAM Recording)
PDW-V1 XDCAM Mobile Deck (Playback and
File Recording)

Specifications

VMC-IL6615:
1.5 m(5 ft)
VMC-IL6635:
3.5 m(12 ft)

SONY

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EB 1177 - black vert



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